



IOWA STATE COLLEGE  
of  
Agriculture and Mechanic Arts  
LIBRARY

Book No. HD733.2

W856

Accession No. 112201

33762





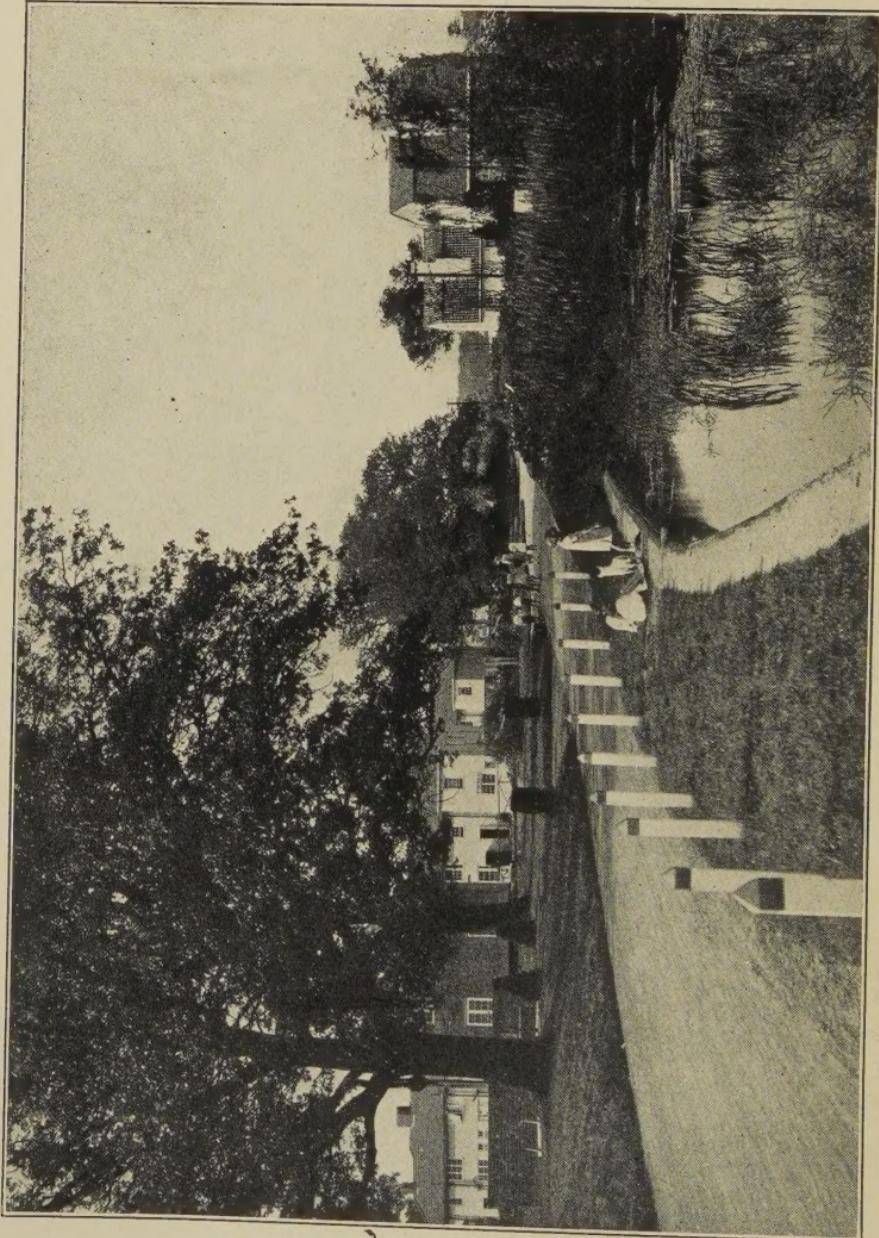
**HOUSING PROGRESS  
IN WESTERN EUROPE**





Digitized by the Internet Archive  
in 2025

HANDSIDE LANE, WELWYN GARDEN CITY



# HOUSING PROGRESS IN WESTERN EUROPE

BY

EDITH ELMER WOOD, M.A., PH.D.

AUTHOR OF "THE HOUSING OF THE UNSKILLED  
WAGE-EARNER," ETC.



NEW YORK  
E. P. DUTTON & COMPANY  
681 FIFTH AVENUE

Copyright, 1923,  
By E. P. DUTTON & COMPANY

*All rights reserved*

STATE ALUM  
"ALABAMA"  
PRINTED IN U.S.A.

4B

Printed in the United States of America

## CONTENTS

CHAPTER	PAGE
I. THE WESTERN EUROPEAN HOUSING PROGRAM	1
II. PRIVATE INITIATIVE IN GREAT BRITAIN.....	10
✓ III. STATE ACTION IN GREAT BRITAIN.....	39
IV. HOUSING IN BELGIUM.....	65
V. PRIVATE INITIATIVE IN FRANCE.....	89
✓ VI. STATE ACTION IN FRANCE.....	111
VII. HOUSING IN ITALY.....	132
VIII. HOUSING IN HOLLAND.....	153
IX. THE RIGHT TO A HOME.....	179
APPENDIX.....	191
BIBLIOGRAPHY.....	197
INDEX.....	203



## ILLUSTRATIONS

HANDSIDE LANE, WELWYN GARDEN CITY . . . . .	<i>Frontispiece</i>	
KINGSLEY ROAD, BOURNVILLE . . . . .	<i>Facing page</i>	14
OLD OAK ESTATE, BUILT BY THE LONDON COUNTY COUNCIL . . . . .	" "	60
THE PLEASANCE, ROEHAMPTON . . . . .	" "	62
PLAN OF COTTAGES BUILT AT MORTSEL BY THE GOEDKOOPE WONING . . . . .	<i>Page</i>	78
COTTAGES AT MORTSEL, NEAR ANTWERP, BUILT BY THE GOEDKOOPE WONING . . . . .	<i>Facing page</i>	78
COAL MINER'S COTTAGE AND ROSE GAR- DEN AT GENCK-WINTERSLAG . . . . .	" "	82
TYPE OF SEMI-DETACHED COTTAGE AT CHEMIN VERT, RHEIMS, BUILT BY THE FOYER RÉMOIS . . . . .	" "	100
FOUR 4-ROOM COTTAGES AT TERGNIER, BUILT BY THE CHEMIN DE FER DU NORD . . . . .	" "	106
ONE SECTION OF THE CITÉ-JARDIN AT SURESNES BEING BUILT BY THE PUB- LIC HOUSING OFFICE OF THE DEPART- MENT OF THE SEINE . . . . .	<i>Page</i>	128

## ILLUSTRATIONS

COTTAGES FOR LARGE FAMILIES AT LES LILAS, DEPARTMENT OF THE SEINE ..	<i>Facing page</i>	130
A BLOCK OF WORKING-CLASS APARTMENT HOUSES BUILT BY THE ISTITUTO PER LE CASE POPOLARI IN THE TRIONFALE QUARTER, ROME, 1921-22.....	" "	146
A GLIMPSE OF THE PRINCIPAL STREET AND A CORNER OF THE PIAZZA BENEDETTO BRIN AT GARBATELLA, ROME, GARDEN SUBURB BUILT BY THE ISTITUTO PER LE CASE POPOLARI.....	" "	148
A NEW APARTMENT HOUSE QUARTER BEING BUILT ON THE FLAMINIAN ROAD AND THE TIBER, ROME, 1921- 23, BY COOPERATIVE SOCIETIES OF GOVERNMENT EMPLOYEES.....	" "	150
TEMPORARY COTTAGES OF BRICK AND FRAME BUILT BY THE HOUSING DE- PARTMENT OF THE CITY OF AMSTER- DAM.....	" "	164
MUNICIPAL COTTAGES AT HILVERSUM...	" "	168
SLUM CLEARANCE AT THE HAGUE. AN ALLEY IN THE OLD FISHING VILLAGE OF SCHEVENIGEN, WHICH IS BEING DEMOLISHED AS THE PEOPLE ARE . . . MOVED TO BETTER HOMES.....	" "	176

# **HOUSING PROGRESS IN WESTERN EUROPE**



# HOUSING PROGRESS IN WESTERN EUROPE

---

## CHAPTER I

### THE WESTERN EUROPEAN HOUSING PROGRAM

#### Western Europe Committed to Good Housing

An Englishman who sat opposite to me at an international luncheon in London recently, following some of the inevitable banter about American prohibition, surprised me by saying,

"If you Americans worry through the first few years of enforcement difficulties and stick to your prohibition experiment, you are going to produce a race of men and women so superior, mentally and physically, to any other, that if the rest of us don't follow suit, in fifty years you will be undisputed masters of the world."

To which I countered, "Other things being equal, perhaps. But other things are *not* equal. What I have been thinking is that if you British persist in pulling down all your slums and in building a charm-

ing little six-room-and-a-bath cottage-in-a-garden for every British family, other things being equal, and other countries not following suit, *you* will be undisputed masters of the world in *less* than fifty years."

Whether the elimination of slums or the elimination of alcohol will turn out to be the more potent factor in race improvement is in a fair way to be settled by a huge, though unintentional, laboratory experiment. For it is not altogether unlikely that we shall make prohibition effective and permanent, and it is certain that all of western and central Europe is committed to slum elimination and the erection of good houses.

### European Housing Conditions not Worse than Ours

Present economic conditions hamper the carrying out of this program. War debts, depreciated currency, devastated areas and unbalanced budgets will delay its completion for a number of years. But the goal sought is clearly defined, and all faces are set towards it. Some, at least, of the means of reaching it are fully agreed upon. Everywhere a beginning has been made, and in one or two countries the completion of the program is actually discernible on the horizon.

There is a wide-spread, but fallacious view in the United States that European housing conditions are so much worse than ours as to make action necessary which would be uncalled for here. The reverse is true. We have housing conditions worse than any which now exist in London or Paris or Brussels or Amsterdam. Slum clearance has been carried on in London,

for instance, to the point where nothing remains which is structurally injurious. They are planning to operate next on the so-called by-law streets with their rows of two-story brick dwellings, like the ones in Philadelphia,—dingy and ugly, to be sure, but with no lack of air or light or privacy.

During the past year, I have made a point of seeing, under the guidance of visiting nurses or rent collectors or other competent persons, examples of the worst houses that remain in London and Paris, and also, more hurriedly, in other French and English, as well as Dutch and Belgian cities. And I can assure my fellow-countrymen that I have nowhere seen houses even remotely comparable to the ten thousand old-law tenements of lower Manhattan, built before 1879, with their hundreds of thousands of inhabited rooms devoid of any opening to the outer air. Nor have I seen any surviving layout as bad as that of the North End of Boston, with its four- to seven-foot streets between five-story buildings and labyrinths of rear tenements filling the interior of its blocks.

The people of Western Europe have undertaken national housing schemes, not because their need is greater than ours, but because they are more convinced than we of the importance of good housing in the making of good citizens and of the obligations of communities in connection with the house-supply.

#### European Public Opinion in Advance of Ours

Public opinion on housing questions in Europe is at least a generation ahead of ours in the United States.

We are still discussing points which they settled forty years ago. Accustomed to regard America as a synonym for progress, Europeans find it hard to believe, for instance, that we still cling to the exploded theory that supply and demand, in the long run, produce satisfactory homes for working people.

There have always been two schools of thought in regard to housing, and probably always will be—the private initiative group and the state action group. The two tendencies are nowise confined to housing, of course, but are discernible in the handling of all social problems. The effect of our complex modern life, especially in crowded cities, has been to enlarge the sphere of government action and to force us to do many things collectively which our forebears attended to, each for himself.

### The Private Initiative Group in Housing Reform

In the early years of housing reform the private initiative group were in the saddle, as they still are with us. They convinced themselves, however, that commercial enterprise did not and could not produce satisfactory homes for working people, because there was no profit in it. They then set out to see what they could do by eliminating profit. They tried philanthropic foundations and limited-dividend housing societies, housing by employers of labor, and cooperative associations of would-be tenants or home-owners. They did very much more than we have done in any of these directions. And they proved their contention

that on an at-cost basis everybody could be provided with a proper home.

The whole problem then resolved itself into one of credit. The farther they went, the more they realized the vastness of the task they had embarked on and the utter inadequacy of the capital which any individual or any group of individuals could command. So they turned to their governments and asked for housing loans that they might accomplish more. And as time went on, they asked for larger and larger loans, for lower rates of interest, and for longer periods for repayment. European governments today lend to non-commercial agencies for working-class housing 75, 85, 90 and even 100 per cent of the cash needed and feel that the citizens who donate their time and energy are doing their full share.

### No Subsidy Involved in Pre-war Housing

These housing loans did not involve any subsidy. In fact, before the World War, the only form of housing subsidy at all in vogue in Europe was the negative kind we have tried out a little in the United States,—namely, tax exemption. Otherwise the use of subsidy was wholly exceptional. It was tried in Ireland, where everything was abnormal, and it existed in principle on the statute books of Holland, Italy and Spain, but hardly any use was made of it. The important building programs carried out in Great Britain, Germany, Belgium, France, Italy and Austria, were on a strictly at-cost basis.

It might be wise to define subsidy before we go

farther, since the word is used in American housing discussions in an incredibly loose way.

A subsidy is, I take it, a money grant on the part of a government,—an outlay for which no direct return is expected. The tax-payers may or may not get their money's worth in some indirect resulting benefit, but the money, as such, does not come back. That is what is meant when we talk about a ship subsidy or a railroad subsidy. No one calls the farm loan banks a scheme for subsidizing agriculture. It is clearly understood that the farmer borrows the money and returns it with interest. The government supervises the transaction to make it safe and easy. Yet when something similar is proposed for housing loans, distinguished and ordinarily clear-headed gentlemen brand the proposal as a subsidy scheme. I have even heard some of the same men advocate tax exemption on the ground that it was *not* a subsidy.

Among the private initiative advocates, a conservative group, particularly active in Belgium and France, have specialized in the encouragement of home ownership. This phase has received less attention in England, Italy and Holland.

### The Growth of State Action

Gradually, the state action group grew stronger, as it became evident to most people that private organizations, even with government loans, were useful chiefly to start things moving and to blaze the trail, but that the actual carrying out of the whole huge program could only be put in the hands of city, province, and

nation. In general, in recent years, state action has grown more rapidly than private, though both have increased. Also, as Thompson long ago pointed out, private individuals have done most where they have had municipal housing to compete with, and government housing has been greatly benefited by the rivalry of private organizations.

Roughly, it may be said that the period from 1850 to 1885 in Western Europe was one of discussion and private experiment. Most European housing laws originated in the late eighties or early nineties. The next twenty years were the palmy days of the limited-dividend societies aided by government loans. Municipal housing, though its beginnings go back to the late sixties, came prominently to the front in the five years preceding the World War.

The era of experiment was approximately over when the war broke out. European countries had decided, for the most part, what to do and how to do it. They were just getting their stride in 1912 and 1913 for the big effort which was to supply every family with a real home.

### **Abnormal Building Costs after the War Resulted in Subsidies**

First came the war, which suspended all building, and then the sensational increase of prices, which prevented its resumption. All the world, neutral as well as belligerent, was suffering from the housing shortage. And the economic machinery for supplying the demand was hopelessly dislocated.

At the highest peak of prices, which occurred between July and December, 1920, building costs rose in the various countries of Western Europe to figures from three times to over six times those of 1914. Commercial building was dead, and so was at-cost building. Nobody knew how many years would elapse before they could be revived. The only way to resume the suspended housing program was through the use of subsidies. Nobody wanted to have subsidies, but they seemed the lesser evil. So, purely as an emergency measure, and for a limited time, one country after another adopted them.

### Rebuilding the Devastated Areas

In France, Belgium and Italy, the pinch of the housing famine had been immensely aggravated by the wholesale destruction of dwellings during the war. Belgium had 80,000 war-wrecked homes, Italy 200,000 and France 600,000. By superhuman effort and sacrifice, with little or no assistance from indemnities, by straining the credit of their governments almost to the breaking point and sacrificing an otherwise balanced budget, Belgium and Italy have about finished the rebuilding of their homes, and France, in spite of the appalling magnitude of her task, is approaching its completion.

The rebuilding of the devastated areas has been done by specially created administrative machinery and specially created funds. It is a story apart and cannot be adequately described in this volume. It is an inspiring story of human courage, energy and devotion.

But it forms part of the history of the war rather than of the history of housing. Only it must always be borne in mind in estimating comparative effort or comparative results that if that tremendous amount of energy, technical, industrial and financial, had not been absorbed in rebuilding old houses, the new work undertaken in France, Italy and Belgium could have been, and doubtless would have been, on a much larger scale. And we shall find here and there (as at Tergnier and Rheims) housing work in the devastated regions which we must include in our study because, instead of simply reproducing old streets and old buildings, something new and better has been evolved, with the same aims and standards as the best in the unravaged districts and with the added merit of having been achieved in the face of overwhelming obstacles.

## CHAPTER II

### PRIVATE INITIATIVE IN GREAT BRITAIN

#### Legislative Retrospect

The early history of British housing legislation and accomplishment should be fairly familiar to American readers, but the following summary may refresh our memories.

**1851. Laboring Classes Lodging Houses Act**, secured by Lord Shaftesbury to supplement his factory and health legislation, permitted the Public Works Loan Commissioners to lend money for the housing of working people to local authorities or to private associations. It was little used for many years.

**1868-1882. The Torrens Acts** were a series providing for the demolition of insanitary or obstructive houses, singly or in small groups.

**1875-1882. The Cross Acts** were a series permitting the acquisition and clearance of large slum areas. They have been extensively used.

**1875-1907. Public Health Acts** provided for sanitary inspection and established standards of light, ventilation, over-crowding, etc.

**1885. Housing of the Working Classes Act** was

a consolidation of the Shaftesbury, Torrens and Cross enactments.

**1890. Housing of the Working Classes Act** is still known as the Principal Act. It greatly liberalized the terms of the 1885 Act and simplified its procedure. Work under Part III (originally the Shaftesbury Act) went forward rapidly thereafter and slum clearance continued.

**1899. Small Dwellings Acquisition Act** represents the only legislative effort in Great Britain to promote home ownership among working people. It has been relatively little used. So large a proportion of the British people are renters by habit and preference that it has not exerted a wide appeal.

**1909. Housing of the Working Classes and Town Planning Act** was of great importance. It liberalized still further the terms of housing loans, increasing the proportion of money needed which could be lent and the time for repayment. Local authorities could borrow all or part of the money required from the Public Works Loan Commissioners for 60 years (80 for the land) and Public Utility Societies could borrow two-thirds of the needed cash for 40 years. In both cases the interest rate at that time was  $3\frac{1}{2}$  per cent, but this depended on market fluctuations. Up to 1909 municipal housing had been optional. It now became obligatory where a shortage was judged to exist. The town planning powers conferred have had far-reaching results in preventing congestion in un-built-on areas.

**1876-1913. Industrial and Provident Societies**

**Acts**, while not primarily concerned with housing, have been of great assistance. The Public Utility Societies formed under their provisions, with limited dividends and non-commercial purposes, have played a big part in British housing and will doubtless continue to do so.

**1919. Housing and Town Planning Act** (July 31) was passed to redeem pledges made to the volunteer soldiers of Great Britain that when the war was over they should have homes worth fighting for. In view of abnormal building costs, a subsidy was provided to meet deficits. The bulk of the work was to be done by local authorities. This act and its corollaries will be more particularly considered in the next chapter.

**1919. Acquisition of Land Act** (August 19) aimed to facilitate the expropriation of land and assessment of compensation for the purposes of the housing act.

**1919. Additional Powers Act** (December 23) empowered local authorities to raise money by the issue of housing bonds, increased the inducements to Public Utility Societies to build, and offered private builders a subsidy for all small houses, complying with certain standards, completed within a year. The time was subsequently extended to 1922.

**1921. Housing Act** consists of minor amendments to the Principal Act. One new provision of considerable potential importance permits loans, up to 50 per cent of the money needed, to be made by the Public Works Loan Commissioners to approved asso-

ciations for developing garden cities under conditions similar to those governing loans to Public Utility Societies for the construction of dwellings.

**1915-1920. Increase of Rent and Mortgage Interest Restriction Acts** were emergency enactments passed to prevent war profiteering on the part of landlords and money lenders. Landlords were allowed in 1920 to increase their rentals 30 per cent on the figures of August 3, 1914, and in 1921 were permitted another 10 per cent.

So much for the legislative framework which conditions accomplishment, but which is also to a large extent the result of continued experiment and experience.

### The Philanthropic Foundations—Bournville

In the matter of housing foundations, philanthropic trust funds, out-and-out gifts of wealthy individuals, more has been done in Great Britain than in any other country or in all other countries put together. So when we come to see how thoroughly Great Britain has adopted municipal housing, we cannot say it was for lack of enterprise, or public spirit, or generosity among her people.

The Peabody Foundation, established in London in 1862, was the first of a long line. Ten early London foundations built accommodations for 125,000 people. Most of their houses were large and dreary block tenements. But they represented the best ideas of the time and were a great improvement on what they re-

placed, as lowered death rates bore ample testimony.

There is no necessary connection between foundation housing and barrack tenements. Some of the most charming garden villages in England, which have had great influence in setting the recent high standard of the government housing schemes, owe their existence to trust funds. One thinks at once of Bournville (1901) and next, perhaps, of Earswick, near York, the creation of the Joseph Rowntree Village Trust (1904). The founders of both, it happens, were Quakers, and both were cocoa manufacturers. Their interest in their employees was by no means limited to housing, and their benefactions in the field of housing extended far beyond their own pay rolls.

Mr. George Cadbury, who has recently passed away,\* full of years and honors, beloved by all who had the privilege of knowing him, must rank among the great figures in the history of housing. His primary interest in it was humanitarian, but the qualities which made him a successful business man kept his feet on the ground of economic soundness. For fifty years he taught a Bible class of men in Birmingham, and it was his visits to their homes which made him realize early in life the environmental handicap under which city working people struggle. He came to believe that environment is more potent than heredity in shaping the lives of men, and that to improve environment is to perform the most useful civic service. For years he thought about getting people out of their shabby quarters in crowded cities into fresh air and

\* October 28, 1922.



KINGSLEY ROAD, BOURNVILLE.



sunshine among trees and flowers, and at last his ideas began to take shape.

In 1879 he and his brother moved their cocoa works from the heart of Birmingham to an open farming country four and a half miles away. It was an unheard of thing to do, and failure was freely predicted. The works employed 230 hands at that time. There are now over 9000.

Mr. Cadbury built 20 cottages for his work people the first year, but large scale building did not start until 1895, when he put up about 200. His first plan was to sell the houses and build up a group of small free-holders. The impossibility of controlling the future use of the land or the character of future buildings made him substitute 999-year leases. As this also seemed to open the door more or less to speculation, he reverted to tenancy. Finally, he settled on 99-year leases, whether to Public Utility Societies or to individuals.

Town-planning principles were being worked out experimentally at the same time,—width of streets, number of houses to the acre, distance between houses, etc.

Finally, in 1901, Bournville Village Trust was established, as a gift to the nation, and Bournville Estate turned over to it. It contained at that time about 500 acres and several hundred cottages. It now contains nearly 1000 acres and 1077 houses. Its capital value is estimated at £373,428, including the schools and community house (Ruskin Hall), which have been presented to it by Mr. Cadbury and his family, and

440 cottages. The remaining houses are not the property of the Trust. In the early days it sold 280 to occupants. The rest have been built by Public Utility Societies or, in a few cases, by the individuals living in them.

It was characteristic of Mr. Cadbury's economic views that in the trust deed he advised rents being fixed at such figures as would make the houses available for working-class tenants and others of small means "without, however, placing them in the position of being recipients of a bounty." The specific aim set was that the houses should return 4 per cent on the capital invested.

"The Trust Deed enacts that, after making full provision for repairs and maintenance, the income shall be employed in laying out the Estate, building houses, and in purchasing other estates, either in the neighbourhood of Birmingham or elsewhere, and in promoting housing reform." (From *Bournville Housing*, a pamphlet issued by the Bournville Village Trust in 1922.)

In pursuance of the last broad aim, we find the Trust a shareholder in First Garden City Ltd. (Letchworth), Hampstead Garden Suburb Ltd., and other experiments in better housing. Of the 440 cottages owned by the Trust, more than half (267) are rented at sums not exceeding eight shillings sixpence (roughly two dollars) per week.

The excess of income over expenditure for the year 1921 was £12,706, representing 3.13 per cent on the total capital. On the developed portion of the estate, the net income for the year was over 4½ per cent. All

of this income goes back into the trust fund, and the aggregate amount from 1901 to 1921 inclusive is £107,737.

The estate has been included, since 1911, in the city limits of Birmingham. Its population is about 5500. Less than half of the householders are employed in the Cadbury works (42 per cent). The number of dwellings to the gross acre in different parts of the estate varies from seven to ten. Every dwelling has a garden.

"The gardens are laid out and planted when the house is built, the expense being included as part of the capital cost of the houses, but thereafter each tenant is entirely responsible for the maintenance of his garden, both front and back. They are well kept in practically every case. A belt of fruit trees, mainly apples, is planted at the bottom of each garden." ("George Cadbury, 1839-1922," Memorial Number, *Bournville Works Magazine*.)

Bournville Village, in its forty-odd years of life, has had time to attain full beauty of hedges, flowers and trees. Its broad, shady streets and ample gardens have a restful charm, and it must ever be a place of pilgrimage to the student of housing progress.

The following figures are worth pondering:

*Death-rate per 1000*

*Average for 5 years ending 1914*

Bournville .....	4.9
Birmingham .....	14.4
England and Wales .....	13.8

*Infant Mortality Rate per 1000 live births  
Average for 5 years*

Bournville .....	40.6
Birmingham .....	125.4
England and Wales .....	108.6

### Public Utility Societies

Mention has already been made of the part played by Public Utility Societies in the building of Bournville. As these organizations, along with foundations and employers, are the chief agencies through which individual initiative in housing shows itself in Great Britain, we will describe the Bournville societies, which are typical of many others.

Public Utility Societies must be non-commercial in character. They must have as their object the building and renting, or the building and selling of houses of approved standard to workingmen and others of small means. Their dividends before the war could not exceed 5 per cent. This has now been increased to 6. Originally they could borrow 50 per cent of the cost of the houses they were building from the government at  $3\frac{1}{2}$  per cent interest. Since 1919 they can borrow 75 per cent of their capital, but must pay 6 per cent interest. There is, however, an interest subsidy since 1919, amounting until 1927 to half of the interest payable. Subsequently to that date, it will be 30 per cent. Repayment of these loans may be spread over 40 years.

Of the four societies at Bournville, the last, Woodlands Housing Society Ltd., need not detain us, as it

has only just started building and is very similar in character to Weoley Hill.

The first to be organized was **Bournville Tenants Ltd.** It was registered under the Industrial and Provident Societies Acts in 1907 and began operation by leasing 20 acres of land from the Bournville Village Trust for 99 years. The whole tract has now been developed, and 145 houses have been built and let to shareholders.

"Evidence of the success of this Society is found in an examination of the balance sheet for 1921. Apart from loan-stockholders, there are 290 shareholders, whose holdings average £47. After setting aside a sinking fund, designed to replace the property in 99 years, interest was paid in full on both shares and loan stock, and a good balance carried forward. . . . The Committee are able to pay the maximum amount of interest on capital allowed under the rules of the Society without increasing rents to the maximum (allowed under the Rent Restriction Acts). The rents of the dwellings are therefore very moderate."

The Committee referred to is the governing board elected by the shareholders. The holders of loan stock are also represented to secure their interests. Loan stock is an obligation ranking immediately after the government loan or first mortgage. The great advantage of the system is that it permits groups of persons of small means, whose own savings would be wholly inadequate to erecting a dwelling, to acquire, jointly and severally, a borrowing power, which becomes adequate by the assumption of joint and sev-

eral responsibility, through the willingness of the government to supply the greater part of the loan.

**Weoley Hill Ltd.** is also a cooperative society, but its houses are sold to the shareholders instead of rented. It has a particularly attractive site—80 acres of high ground overlooking a wide sweep of undulating country. It was started just at the beginning of the war and, of course, suffered a long period of inaction. Work was resumed in 1920, and, when I saw it in the spring of 1922, a considerable group of cottages and bungalows was nearing completion. In 1915 and 1916, 36 five-room-and-bath cottages were sold at £235 each, and 22 six-room-and-bath houses for £260 each. Of the recent houses, 12 five-room-and-bath bungalows sold for £750, 48 six-room-and-bath cottages at £900 to £1000, and 4 larger and more elaborate houses for £1400 and £1500. These contracts were made at peak prices, and future houses will cost much less. The development will eventually contain about 800 dwellings, predominantly middle class.

**The Bournville Works Housing Society Ltd.** is strictly an employees' organization. It was formed in September, 1919, to take advantage of the loans and subsidies offered under the new Housing Act. Each member on joining must take up a one-pound share. On being allotted a house, he must increase his holding to £15 and ultimately to £75, on which he receives 6 per cent interest. Thirty six-room-and-bath houses were built, which rent for sixteen shillings six pence per week, with rates and inside repairs paid by the

tenant. Under the present 50 per cent interest subsidy, all charges are paid, including 4 per cent on the private capital invested (loan stock). But after the subsidy drops to 30 per cent in 1927, it will be impossible to pay any return on the private capital.

In other words, with high building costs and 6 per cent interest to pay on government loans, Public Utility Societies cannot continue building, for it is not possible for working people to pay higher rents.

The vital importance of the rate of interest is emphasized over and over in the Bournville Housing pamphlet, which carries much weight because of the years of housing experience of the Trust and the business acumen of its founder.

"The obtaining of capital at a low rate of interest is the vital factor in any housing scheme at the present moment, and the government could give no greater assistance to local authorities, and other bodies and individuals, than to make it possible to obtain cheap capital."

For present building, government loans have been discarded. A gift of £75,000 has been made to the Employees' Pension Fund on condition that it be invested in housing schemes at 4 per cent. With this help, 18 cottages are being built by the Works Society and 50 more are planned. They will have four, five or six rooms and bath and will cost from £442 to £564 each. Since these contracts were let, prices have fallen considerably more.

These Bournville Societies have been described as examples of the Public Utility Society in general.

There is one London organization, however, which I cannot close this section without mentioning. It is probably better known to Americans than any other Public Utility Society,—Hampstead Tenants Ltd. Even those who have never visited Hampstead Garden Suburb on the outskirts of London are familiar, in magazine illustrations, or on the screen, with its charming cottages half buried under climbing roses and hidden by shrubs and hedges, with its tree-lined streets and eye-satisfying vistas. Many Americans had the pleasure of meeting its animating genius, Mrs. Barnett, when she visited this country in 1920. The layout and much of the architecture is the work of Mr. Raymond Unwin.

Hampstead contains some houses for working people and many for middle class and professional people, as well as a few built by the strictly prosperous. For it is part of Mrs. Barnett's social philosophy that the various economic strata should be mixed instead of segregated.

### Housing by Employers

The classic example of an employer's housing development in England, strictly for his own work people, is Port Sunlight, near Liverpool, built by Lord Leverhume, the soap manufacturer. It has been described so often that it need not be re-described here. Its great importance lies in its pioneer quality (it was started in 1887), in the good standards it set, and in the statistical studies by Dr. Arkle, Health Officer of Liverpool, which it inspired, which show the startling

difference in height and weight between Port Sunlight school children and those of the same age and economic stratum in Liverpool.

Later housing activity by employers has tended to take the form of subscribing heavily to the loan stock of Public Utility Societies organized for the purposes of the special development needed.

### The Garden City Movement\*—Letchworth and Welwyn

Leaders of the Garden City movement today are trying to make it clear that theirs is not primarily or exclusively a housing movement. It is both more and less. In so far as it deals with housing, its affiliations are with the Public Utility Societies and the private initiative group. This group is devoting a great deal of attention, at the present time, to the important subject of Regional Planning.

Fundamentally, it is a decentralizing movement,—an effort to check the growth of big cities by promoting the creation of new towns, planned in advance to prevent congestion, voluntarily limited in size, but containing all the essentials of complete community life,—factories and business districts as well as dwellings, schools and amusements.

Land tenure and an agricultural belt are also recog-

\* The propaganda societies behind this movement are the Garden Cities and Town Planning Association, 3, Gray's Inn Place, London, Cecil Harmsworth, Pres., W. McG. Eager, Sec., and the International Garden Cities and Town Planning Federation, same address, Ebenezer Howard, Pres., H. Chapman, Sec.

A valuable reference library and a most kindly welcome make these offices the happy hunting ground of the visiting student of housing and town planning.

nized as essential elements of a Garden City in Mr. C. B. Purdom's definition (*Town Theory and Practice*, 1921), which has recently been adopted by the British Garden Cities and Town Planning Association.

As the International Garden Cities and Town Planning Federation still uses the much more general definition of 1913, and as common practice on the continent and in the United States calls any group of dwellings in a setting of grass and trees a garden city,—it becomes exceedingly difficult to be clear, in a discussion of housing in several countries, without being tiresomely verbose. The International Federation would confer a real service by giving us an authoritative ruling, either accepting or rejecting the new British definition.

One may regret that Mr. Howard did not choose a more distinctive name for his very distinctive idea, but it is too late now to call for a new christening. And he and his friends have put the phrase to such good use that it would be ungracious to cavil at their monopoly of it.

Here, then, is the new British definition: "A Garden City is a town planned for industry and healthy living; of a size that makes possible a full measure of social life, but not larger; surrounded by a permanent belt of rural land; the whole of the land being in public ownership or held in trust for the community."

Under this definition, of course, Letchworth and Welwyn are the only Garden Cities as yet built or planned anywhere in the world. In this restricted sense, the term will be used in this work.

To me, the life of Mr. Ebenezer Howard, father of the Garden City idea, is particularly inspiring. He possessed neither wealth, title, fame, nor influential connections. He was a shorthand writer, exercising his calling within the four walls of a London office, and he had nearly attained the half-century mark before he addressed himself to a larger audience. Yet he dared to dream of a new sort of city, which should bring town and country together, combining the advantages and escaping the disadvantages of both, and he put his dream into a little book, written so simply and concretely and humanly, and with such a firm grip on the practical, that it took hold of the imagination of men of wealth and experience, who contributed time and money to make the dream come true.

We Americans may enjoy imagining that the ten or twelve years Mr. Howard spent in his early youth (just after the Chicago fire) in our own Middle West made it easier for him to conceive his idea of wholly new towns planned in advance,—an idea which seemed positively revolutionary in England.

The book, *Tomorrow* (called *Garden Cities of Tomorrow* in later editions) appeared in 1898. The following year, the Garden City Association was formed to promote the idea. In 1901, with Mr. Justice Neville as chairman and Mr. Thomas Adams as secretary (whom Americans know as Town Planning Adviser to the Canadian Government), a more active campaign was launched. A conference was held at Bournville, attended by some 300 delegates, where Mr. Cadbury's experiment of moving his factory into the

country was studied and discussed. The next year a conference was held at Port Sunlight with 1000 delegates.

At the same time, July 1902, a company was organized to secure a suitable site. Lord Northcliffe (then Mr. Alfred Harmsworth) was one of the principal subscribers and remained to the end a firm friend of the movement.

The site chosen was in Hertfordshire, on the line of the Great Northern Railroad thirty-four miles from London. An average price of £40 per acre was paid to 15 different owners. About seven square miles (4500 acres) was eventually secured.

First Garden City Ltd. was organized in September, 1903, to take over the land and enterprise. Building began in 1904. Letchworth is now a sure-enough community with a population of over 12,000. Only two-fifths of its area is planned for urban development. The rest will remain agricultural. In 1921 it had 43 public buildings, 83 shops, 141 factories and workshops, and 2696 dwellings.

Messrs. Parker and Unwin drew up the town plan and exerted a helpful influence on its architecture. The only hard-and-fast esthetic rule made, however, was that all roofs should be of red tile. This has given a certain individuality and harmony to a view of Letchworth from any direction, in spite of great variety in color, type and style of housing, and the presence even of occasional architectural freaks.

One of the basic economic concepts on which Garden Cities are built is that the unearned increment, caused

by creating a city on agricultural land, is to be used for the good of the people in general and not go into the pockets of real estate speculators. Accordingly, the articles of association of First Garden City limit dividends to 5 per cent cumulative.

The authorized capital was £300,000 of which £84,000 was subscribed at the start.

Of course more money was needed than had been anticipated and less was subscribed. The balance had to be borrowed at a relatively high rate of interest. Very large expenditures had to be made in the purchase of the estate, the laying out of roads, the installation of water, sewers, gas and electricity, before any returns came in at all. The first years showed deficits, then no returns, then very small ones. Things were looking better when the war came and profits stopped again. After the war, dividends of  $1\frac{1}{2}$  per cent were declared until 1922, when 4 per cent was paid. It is expected that 5 per cent will be attained in 1923.

This is very understandable, and the showing made does honor to all concerned. But it has not drawn capital into Garden City ventures. This is why Letchworth for many years had no successor.

The directors learned many things from their experience. One of them, Mr. Howard told me, was not to develop too much of the estate at once. Miles of roads, sewers, and water mains, completed much in advance of building requirements, are just so much capital standing idle.

Another lesson learned was that the large proportion of agricultural land at Letchworth was too great

a burden to carry. As long as building is prohibited in it, its rental value does not rise.

Both lessons are being applied to Welwyn, which is being developed in sections, and which, though planned for 40,000 people, contains only four square miles instead of seven, the agricultural belt being the part reduced.

Again, the small holdings, into which Letchworth's agricultural belt was cut up, proved too large to be cultivated in spare moments and too small to reward a man's whole time. So at Welwyn the whole agricultural belt has been leased to a cooperative dairy company, the New Town Agricultural Guild, which is producing certified milk from a pedigree herd, kept in accordance with the best modern methods.

The directors of First Garden City have been very successful in bringing diversified industry to Letchworth. Sixty different industries are represented there. Among them are automobile works, steel and rubber plants, printing and binding establishments (the familiar red volumes of Everyman's Library come from Letchworth), furniture, embroidery, and corset factories.

In fact there is more industry in Letchworth than labor supply, and many of those employed there live in Hitchin and the surrounding countryside. To restore the desired balance, a large group of working class cottages (707) was going up when I was at Letchworth. They were being built by the Letchworth Urban Council (the local authority) as part of the government housing program. Most of the

earlier houses at Letchworth were built by Public Utility Societies.

First Garden City does not itself build houses. It is a developing and holding company. It has installed and runs such public utilities as water, gas and electricity. To the municipal authorities are left police, schools and health. Roads, once completed, are turned over to them for maintenance. No civil government was organized at Letchworth for some years. At Welwyn, it was organized from the start.

Letchworth's fine record for health is well known. From Mr. Purdom's book, *The Garden City*, I find the 1912 death-rate was 8 per 1000 inhabitants (rate corrected for sex and age), and a 1921 brochure I have at hand gives the death-rate as 5.9, and the infant mortality rate as 50.6.

No land is sold at either Letchworth or Welwyn except for schools, churches and municipal buildings, which are obliged to have freeholds. But as the leases are for 99 years and some for 999 years, I cannot see how the unearned increment is kept for the community in the meantime, or how speculation is eliminated. If ground rents were revised every ten years, for instance, it would be different, or if renting or selling prices of buildings were controlled. But they are not.

The matter is important from the point of view of a possible Garden City in America. Building on rented ground is foreign to our habits. If the Letchworth land tenure accomplishes nothing more than our zoning ordinances and restricted deeds, it would be foolish to insist on it. On the other hand, the unearned

increment would be much more effectively preserved for the community under the tenancy system advocated by the American Committee on New Industrial Towns.

Regarding the agricultural belt, besides the danger of having too much of it, already alluded to, there is the danger of having too little. It is essential to the Garden City idea that there should be an agricultural belt to act as a buffer against contiguous urbanization. A Garden City might resolve till it was blind not to grow beyond 30,000 or 40,000 inhabitants. If it built up to its borders, the owners of adjoining property would cut it up into building lots and start suburban settlements—good, bad and indifferent; and the more prosperous the Garden City was, the sooner it would become surrounded by slums and jerry built suburbs. The perpetual agricultural belt is necessary as an insulator to prevent involuntary and unregulated growth.

In a diagram, it is all very easy to draw a circle for a city and a bigger circle around it for an agricultural belt, but in practice the configuration of the land, the quality of the soil, location of the railroad, and many other things have to be taken into consideration. The agricultural belt necessarily expands here and contracts there till it is only by courtesy called a belt at all. Even at Letchworth, part of it is much too narrow to serve as an insulator, and at Welwyn this is still more the case. The objection so far has not made itself felt, for neither city has anywhere near reached its limit of growth. What will happen when one of them does? That, I think, is something which

no one can at present predict. If it should turn out that a self-limiting town proves unable to limit itself,—well, in that case the formula will have to be recast. Meanwhile the world is under an obligation to the British group who are trying it out. The development of Regional Planning may furnish an escape from the difficulty.

From all of which it may be summed up that as an experiment in housing and town-planning, in the limitation of dwellings to the acre, in health, in rational living, in the practicability of a slum-less city, Letchworth has proved its case, and its influence on the standards of all of us is greater than we realize.

As a sociological experiment in drawing the surplus population from big cities and in voluntarily limiting the size of cities to be created, Letchworth still has its case to prove.

At the close of the war an effort was made to direct the government's promised housing effort into building Garden Cities—100 Garden Cities was the proposal of one widely circulated pamphlet (*New Towns after the War*). But the general public and the government were unconvinced.

So again the Garden City advocates had recourse to private initiative and launched Welwyn Garden City Ltd. as their contribution to the housing program.

Later, they won a victory in parliamentary circles when they obtained the inclusion of the clause which has been described in the 1921 Housing Act. Welwyn has already profited by it to the extent of a loan for £117,000 from the Public Works Loan Commissioners.

in April, 1922. Other loans are expected as the work advances.

With its private capital doubled by government loans, and with the advantage of the Letchworth experience, it is fair to expect for Welwyn a more rapid growth and prompter arrival at the dividend-paying stage. Welwyn dividends, by the way, may rise as high as 7 per cent cumulative.

Welwyn is in the same general direction from London as Letchworth, but considerably nearer,—21 miles from King's Cross Station. When I saw it in the spring of 1922, it had a good layout of roads, sewers, water mains and electricity. Over 200 houses were occupied by about 1000 inhabitants. Several hundred more were building. There was a large cooperative general store, which was doing a brisk business with the early settlers. There were provisional schools and churches, a restaurant, and the Daily Mail Model Village, an experimental group intended to try out different building materials.

The latest news from Welwyn is that, at the request of the Ministry of Health, the Welwyn Rural District Council has undertaken the building of 100 working-class cottages under the pre-war Housing Act (1909), that is to say, with government loans, but without subsidy. The cottages, which are to contain five and six rooms and a bath, were designed by the City Architect, Mr. Louis de Soissons. Their average cost will be £284 per house, or, including the land and its development, £328. They are expected to meet all costs at a rental of 10 shillings per week. If this

scheme is successfully carried out, it would seem to mark the end of the emergency in Great Britain which made subsidy necessary, and it may well mark the resumption of the nation-wide housing program on an at-cost basis.

### The Building Guilds

No account of the rôle of private initiative in British housing progress would be complete without a description of the recent spectacular rise, fall and resurrection of the Building Guilds.

Historically, the Building Guilds are the offspring of the Guild Socialism preached for some years back by Messrs. A. J. Penty, S. G. Hobson, and G. D. H. Cole. I confess to having thought of the guild idea as attractive, but impractical, and I could not seem to see the contemporary workingman turning his eyes back to a revival of the medieval guild system or its craftsmanship. It looked to me artificial—the sort of thing American trade unionists would promptly dismiss as “high-brow.”

I make this public confession of error for conscience’ sake and to show that I was, at least, not biased in favor of the system. Whatever their underlying philosophy may be, the Building Guilds of England have shown themselves eminently practical.

They came into being in the early months of 1920 (January at Manchester, and April in London) in response to the demand for houses and for labor to build them. The government building program should have been in full swing. Labor scarcity in some trades

and labor disputes in others were causing all sorts of delays, and contractors were afraid to bid except on terms which still further inflated costs. Meanwhile, working people, most of all, were suffering for houses.

The need produced the remedy. A group of Manchester bricklayers suggested a guild organization. The matter was discussed in their own local union, then by the Manchester branch of the Federation of Building Trade Operatives. They went to the local authorities and said, "Give us 2000 houses to build, and we will produce them more quickly, more cheaply and of better quality than the contractors." In effect, the local authorities said, "Get yourselves a legal organization that we can make contracts with, and we will give you a chance." It wasn't so simple as that, but the main facts are what concern us.

A few months later the London Building Guild was formed. A hundred or more small guilds sprang up all over the country, which, under the wing of the Manchester Guild, organized as the National Building Guild Ltd. Eventually, the London Guild was incorporated with the others.

The Building Guild is (1) a workers' organization for production, (2) an organization for service, and (3) a self-governing organization. By workers, it means brain as well as hand workers. The Guildsman knows that architects and engineers and superintendents are needed, as well as carpenters and masons. The cooperation of architects and surveyors was secured through their own professional organizations. The London Guild published a letter from the president of

the Royal Institute of British Architects congratulating the Guildsmen on their prospectus and wishing them Godspeed. The correspondence does credit to both parties.

The Guild is not an organization for profit, but for service. It is registered as such under the Industrial and Provident Societies Acts. It pays union wages to its manual workers and standard fees to its professional men. At first it guaranteed continuous work for the period of the contract, that is, it paid for time lost by reason of holidays, sickness or weather conditions. This was considered a fundamental feature of the Guild policy. They claimed that it was not only fair to the men, but resulted in actual economy because of the better work done.

In bidding for work, they itemized the cost of materials to be used and the cost of labor to be expended, adding a flat charge of £40 per house for the fund from which their rainy-day, sickness and holiday payments were made. A charge of 6 per cent was made for general office and overhead expenses.

As to self-government, it is of course fundamentally a workers' organization, but they have turned down the idea of self-governing shops. They realize the necessity of leadership and of discipline. Managers and foremen are appointed by general committees which are elected by the rank and file.

The Guilds have made good their claim to build first-rate houses cheaply and more quickly than the ordinary contractors. There is a general consensus of opinion as to the high quality of their work. It has

even been criticized as being "too good for working class houses." The reduction in cost is not perhaps very radical, but in-so-far as contracts were awarded them, it was because their bids were cheaper. And in nearly every case, the final costs have been lower than their estimates, at Greenwich by £20 per house and at Walthamstow by £50. The gain in time was partly the result of the enthusiasm developed among the men and partly due to the elimination of strikes and trade disputes.

The break in the government housing program was a serious blow to the Building Guilds. They had already secured contracts to the amount of £2,500,000, but many others, aggregating several times that amount, were on the point of being awarded. However, their growth may have been somewhat too rapid for safety, even as it was.

When I was in London, they were still occupied with their government contracts, but, looking ahead, were turning their attention to securing private work, and with this in view, were holding a Building Exhibit at Olympia. They had also launched a campaign to raise a national loan of £150,000 bearing interest at  $3\frac{3}{4}$  per cent, in order to provide working capital and to establish joinery works and materials depots.

My visit to Walthamstow, where they were carrying out a scheme for 400 houses (which would have been 2000 but for the government halt), fully confirmed what I had heard. The houses were exceedingly well built. The joinery work was all done in shops erected on the site,—doors, window frames, kitchen cabinets,

—all hand work, very true and exact. The wood was well seasoned. Nothing warped or jammed. Drawers did not stick.

Moreover, there was an *esprit de corps*, a pride in their work on the part of the men that was not to be mistaken. They were partners in a great enterprise and bore themselves accordingly. Would the enthusiasm wear off? Perhaps. But an enthusiasm that had stood the test of two years' trial, in fair weather and foul, was at least worthy of respectful consideration. A movement is not unpractical because it has an ideal. Indeed, in a larger sense, nothing can be truly practical that lacks one.

That the Guilds should pursue a course of unbroken success was too much to expect. Their growth had really been too rapid for safety. Not all the Guildsmen were high-minded idealists, not all the local committees were wisely and carefully managed. The less efficient groups gave themselves unnecessary holidays with pay, exploiting the more efficient. The loan failed to materialize on the hoped-for scale. Money due them on contracts was not always promptly paid. Creditors became pressing. In the late autumn of 1922 the National Building Guilds went into the hands of a receiver.

The movement, however, was far from dead. Early in 1923, the London Guild was reorganized, as Guild Housing Ltd., with Mr. Malcolm Sparkes, a very level-headed man, as managing director. A little later, the Manchester Building Guild Committee also decided to reorganize. The doctrine of continuous pay

will be applied "so far as possible." Capital will be hired at a fixed rate of interest without powers of control.

The success of the Guild movement is by no means yet assured. Problems of leadership may land it on the rocks. It has at best a long struggle ahead of it. Organized contractors are not going to watch the growth of such a rival supinely. But even if it should fail in the end, as the foreman at Walthamstow said to me, it will have been worth while to have tried.

## CHAPTER III

### STATE ACTION IN GREAT BRITAIN

#### The National Housing and Town Planning Council

In the year 1900 there was formed in Great Britain an organization which has had immense influence on housing progress in that country,—the National Housing Reform Council, known since 1910 as the National Housing and Town Planning Council. For bulk of accomplishment and for value of accomplishment, it has, in my judgment, no equal among housing organizations in Great Britain or elsewhere.

It prints no periodical and very few formal reports, but sends fortnightly bulletins to its members, which keep them in touch with events and with what they are expected to do to help.

The Council owes much to its first chairman, Alderman William Thompson, of Richmond, who had a large and statesmanlike grasp of all the aspects of the housing problem. Before his death in 1914 he had the satisfaction of seeing the enactment of the 1909 Housing of the Working Classes and Town Planning Act, which was the child of his organization, and the rapid progress made under that law during the succeeding four years. Alderman Thompson was the author of the *Housing Handbook* (1903) and *Housing up to*

*Date (1907)*, with which American students of housing are, or ought to be, familiar.

The present chairman is Mr. F. M. Elgood, a North-of-England architect and former housing commissioner, with a strongly social outlook.

The secretary of the Council from the beginning has been Mr. Henry R. Aldridge, whose unswerving devotion, exhaustless enthusiasm and clear-cut perception of essentials, have kept things moving forward in bad times as well as good.

On its general committee appear such familiar names as George Cadbury, B. Seebohn Rowntree, Wm. H. Lever (Lord Leverhume) and T. C. Horsfall, the father of English town planning.

The National Housing Council has always stood, consistently and unflinchingly, for municipal housing and for effective national intervention. There was no question of subsidy before the war. National intervention meant supplying the needed credit through loans, exerting central control over standards, and stimulating backward communities into action.

### British Public Opinion in 1900

Even as far back as 1900, public opinion in Great Britain in regard to housing had progressed a long way in advance of its present chaotic condition in the United States. Slum clearance and government loans were both accepted in principle, authorized by statute, and to a considerable extent put into practice.

There was no serious disagreement as to collective responsibility for the removal of unhealthful housing

conditions which had been allowed to grow up through collective ignorance or neglect. London, Liverpool, Birmingham, Manchester and other cities, had carried out extensive clearance schemes.

They had got to the point of realizing that commercial builders were not supplying houses of acceptable standards for working people; that if the rank and file were to have decent homes they must be supplied on an at-cost basis, and that there was only one agency which could borrow enough money at a sufficiently low rate of interest to build them, and that was the national government. Only a few very bold people have arrived at this conclusion in the United States.

This was as far as the British agreement went. Admitting that the government must supply the bulk of the capital in the form of long-time loans, the adherents of private initiative wanted to see the actual work of building and the actual work of management carried on by societies and private individuals. They were strongly opposed to municipal housing on the same grounds as are advanced by American objectors. They said it would be expensive, that it would be bureaucratic, that it would get mixed up in politics, but especially that it would be socialistic.

### The Housing and Town Planning Act of 1909

The members of the National Housing Reform Council, while not opposing private activities, were convinced that they could never be developed on a scale large enough to provide a home for every family. They believed that local authorities, urban and rural,

must be made to assume the responsibility for properly housing their citizens, to the extent that it had not been done through other channels. This, then, became the burden of the Council's educational work through lectures, publications, exhibitions and conferences.

The cooperation of labor organizations was sought and secured. Labor representatives figure on all their committees, and labor organizations contribute to their support. A keen desire for better housing conditions has been aroused among the workers.

Gradually, town planning was added to their creed, thanks largely to Mr. Horsfall's part in making known what Germany had done in zoning and control of land values. Town planning was also taken up by the private initiative group.

In a few years' time the National Housing Reform Council had crystallized its views into a national housing program, the first step in which involved certain legislative proposals. A deputation waited upon the Ministry in 1906 (the usual British procedure for starting legislation) and received assurances that the matter would be taken in hand. Mr. John Burns, the labor leader, at that time President of the Local Government Board, did, in fact, act as sponsor to the proposed bill. The result, although not without many delays and much hard work, was the passage of the Housing and Town Planning Act of 1909.

Besides making municipal housing compulsory under certain conditions, this act greatly strengthened the hands of the central authority, the Local Gov-

ernment Board. Part II of the Act was devoted to town planning. Its application was permissive. Town planning, in England, applies solely to the laying out of new unbuilt-on areas.

As soon as the Housing and Town Planning Act was passed, the Council turned its attention to encouraging and assisting the local authorities in carrying out their new duties. From 1910 to 1914 a series of regional conferences was held of delegates appointed by the local authorities. England and Wales were divided for the purpose into twelve regions, and several conferences a year were held in each. Every new difficulty in applying the housing law was discussed as it came up. Experience was pooled.

### Municipal Housing before 1909

A rapid retrospect is necessary to understand later events. The act of 1851 made municipal housing possible, but not easy. The first actual ventures in it were under special local legislation. Liverpool tried it in 1869 and again in 1885 and 1891. Birmingham made a small experiment in 1884. The passage of the Act of 1890 was followed by the development of municipal activity and a gradual rise in the housing standard. Cottage flats (two-family houses) and cottages took the place of the large block tenements. Three and four rooms per family became the rule instead of two or three.

The extensive work of the London County Council will be briefly described later. In 1890 it had done

no building. In 1900 it had erected 1500 dwellings for 8000 people. In 1909 it had put up 8000 dwellings for 46,000 people.

The experience of the Liverpool local authorities is especially interesting, not only for the extent and quality of their output, but because of their unique success in getting the identical population which had been dispossessed by slum clearance schemes into their new houses. Since 1897, when their new policy went into effect, they have rehoused from 79 to 99 per cent of the former slum dwellers in their various schemes. Statistics, therefore, of death-rates, infant mortality rates, or tuberculosis rates for these localities, more than cut in two in a few years' time, and arrests reduced (in the Adlington Street area) from 202 a year to 4 (the reductions in the other areas were also extremely large), become of extraordinary value in showing the effect of good housing conditions, even on an already damaged population,—*all other conditions remaining the same*. This may be called the isolation of the housing factor.

Between 1890 and 1900, outside of London, 13 local authorities (one of them rural), had obtained 22 loans from the national government for building working class dwellings under Part III of the Housing Act. Between 1900 and 1910, 74 new local authorities started work and obtained 162 loans.

These figures show that municipal housing was increasing rapidly, but the rate of increase after the passage of the 1909 Act was much more marked.

### Municipal Housing from the End of 1909 to 1915

From the passage of the 1909 Act to March 31, 1915 (by which time the war had checked the movement), 435 housing loans had been sanctioned to local authorities, of which 157 were to rural councils.

From the passage of the 1909 Act to March 31, 1917, a total of £3,185,886 was authorized in 464 loans to 321 different local authorities for the purpose of building 13,477 dwellings. This was in addition to the work of the London County Council.

During the five-year period 1910–1915 the aggregate of loans for municipal housing exceeded by one-half the aggregate for the twenty years preceding.

The Local Government Board, as the central authority charged with the enforcement of the 1909 Act, was proceeding tactfully, but firmly, with its compulsory features. Local housing reports were being insisted on. The dilatory were being stimulated. Up to the outbreak of the war, it had made representations to 1200 of the 1800 local authorities under its jurisdiction, which, after longer or shorter correspondence, would have started them on the road to building houses.

Standards were progressively rising, keeping pace with the best set by the private housing experiments. The three-bedroom standard became definitely British. Twelve families to the acre was rapidly becoming a minimum. Bath-tubs were making their appearance in space-saving combinations with sinks or laundry tubs.

Everything was moving towards an adequate han-

dling of the whole housing situation on an economically sound basis. There would have been fights over standards, localities, quantities, and rents. But the fight over the general policy was won.

Then came the war.

### Government War Housing

As the war advanced, all new housing work ceased, private and public, except what was done by the Ministry of Munitions, the Admiralty, the Office of Works and other government departments under the Defense of the Realm Act. Like that of our Shipping Board and United States Housing Corporation, the work done was for war purposes only. Nearly all of the building, however, was of a permanent character and of a very good standard.

Obviously this work was much better done than would have been possible without their quarter-century experience in housing by public authorities. And, incidentally, ours was far better done than it otherwise would have been, because we had their experience to study.

The following list of ten principal English war-housing schemes and eight Scotch are taken from *The House I Want* (1919) by Captain Richard Reiss.

### ENGLAND

Barrow - in - Furness; Coventry; Farnborough; Islem; Letchworth; Lincoln; Queensferry, Chester; Roe Green, Hurdon; Shirehampton, Bristol; Well Hall, Woolwich.

## SCOTLAND

Alexandria; Clyde Bank; Crombie; Greenock (at Gourock); Glengarnock; Gretna Green and East Riggs; Innegorden; Mid-Lanark.

### Preliminary Investigation and Reports

The National Housing and Town Planning Council kept a watchful eye on the situation, staged a National Congress on Housing Problems at the Close of the War, sent deputations to the Ministry in 1916 and 1917, and took an active part in pushing through the legislation of 1919.

During the last two years of the war it became evident (1) that a housing shortage was rapidly piling up, (2) that building costs were rising with equal rapidity, and (3) that for both these reasons a mere resumption of the old housing program by the old agencies on the old scale would not prove sufficient.

Moreover, there was a very profound stirring of the deep places in peoples' hearts, a quickening of the sense of social justice, a breaking down of class barriers, a growing sense of brotherhood, a profound gratitude to the rank and file of their volunteer army of five million, who were keeping the enemy out of England, who were dying of wounds and exposure in the muddy trenches of Flanders, and to the sailors who were drowning in the Seven Seas on torpedoed food ships. All of England was ready to promise a real home for every family—"homes fit for heroes," as the phrase ran. The public promised it, the news-

papers promised it, Parliament promised it, the Ministry promised it, the King promised it. And undoubtedly, everybody meant it.

Excellent preparatory work was done by several investigating committees.

(1) *The Report of the Royal Commission on the Housing of the Industrial Population of Scotland* (1918) was a monumental affair of 460 folio pages. It had its origin in a Royal Warrant of 1912, the result of agitation against the housing conditions in Scottish mining districts on the part of the miners' unions, as well as by health and welfare groups. Its painstaking investigations were carried on before and during the war, and its revelations of housing conditions in Scotland, not only among miners, but among agricultural laborers, city tenement dwellers and island fishermen, shocked the public conscience. Housing standards are much lower in Scotland than in England, over-crowding much more prevalent, and the one-room dwelling constitutes a veritable scandal. Even allowing an average of three persons to a room, the Commission found it would be necessary to build 121,000 dwellings to care for surplus population and replace grossly unfit houses. To raise the standard to the moderate point of three-room dwellings, would require 236,000. This was appalling in a country of less than five million inhabitants and only one million existing dwellings. The Commission recommended a program, spread out over 14 years, carried out by local authorities, with financial assistance and control from the national government.

(2) *The Report of the Committee appointed by the President of the Local Government Board and the Secretary for Scotland to consider Questions of Building Construction in Connection with the Provision of Dwellings in England and Wales and Scotland, and to report upon Methods of Securing Economy and Despatch in the Provision of such Dwellings* (1918), commonly known as the Tudor Walters report, from the name of the chairman, had a very great influence on standards and procedure.

A circular letter from the Local Government Board to the local authorities of England and Wales revealed a housing shortage which aggregated 796,248 dwellings. The number for Scotland was 115,506. The total was 912,813. The labor organizations asked for an even million. The Tudor Walters Committee advised constructing 500,000 as a minimum.

The Committee gave it as their opinion that in view of the rising standard shown in recent years and the obvious tendency to continue rising, it would be bad economy to build houses of the then accepted minimum standard, which would be wholly unacceptable before the expiration of the sixty years for which loans were contracted. Economic considerations as well as social considerations pointed to a high standard.

Three bedrooms, kitchen, scullery and bathroom was to constitute the minimum accommodation. A parlor should be added for a part, at least, of the houses built. Living rooms should have an area of at least 180 square feet and a southeast exposure wherever practicable. One bedroom should have a minimum

area of 150 square feet, one of 100, and the third of 65. Dwellings were not to exceed 12 to the acre in urban areas or 8 to the acre on rural sites.

Nearly all of the Tudor Walters recommendations were adopted by the Ministry.

Among other useful official reports was that of the Women's Housing Sub-Committee appointed to consider house plans from the point of view of the house-wife. Several practical benefits resulted, especially relating to the inclusion of closets and cupboards and the planning of wall spaces for the placing of furniture.

### Passage of 1919 Legislation

So we come to the 1919 Housing Act and the creation of the Ministry of Health, which was to take the place of the old Local Government Board in administering it.

It was essentially emergency legislation. Its aims were admirable, but its financial provisions were open to legitimate criticism.

(1) It became the duty of every local authority to survey the housing needs of its district, to prepare a plan to meet those needs and to submit it within three months.

(2) In default of action by the local authorities, the central authority was to act.

(3) Financial assistance was to be given by the treasury to meet any deficit resulting from a housing scheme beyond the product of a penny rate.

(4) The town planning provisions of the 1909 Act

became compulsory, all districts with 20,000 inhabitants or over were to have approved plans by January 1, 1926.\*

(5) There were various provisions facilitating slum clearance, building by Public Utility Societies, etc.

Everybody was agreed that if houses were to be built at that time, a subsidy was inevitable. The weak point of the particular form of subsidy adopted was that the nation signed a blank check. The local authorities were to build and administer the houses, but the national treasury was residuary legatee for the deficit. To be sure, the Ministry of Health had to approve plans, contracts and rents, but the division of responsibility was fundamentally unsound.

For the benefit of those unfamiliar with British terminology, it should be explained that what we call a local tax they call a "rate." They only use the word "tax" for what goes to the national treasury. Rates are assessed, not on capital value, as with us, but on rental value. A penny rate means one penny on every pound, or  $1/240$  of the rental value of real estate. Obviously, it is a very small contribution, corresponding to half a mill or less on one of our tax bills.

Even so, everything might have gone on reasonably well if the government had applied the lessons learned during the war to the control of building costs.

The fatal error was that, while inaugurating an impressively large building program and proclaiming

\* Three years have been added to this time in the new Housing Act in order to encourage regional planning.

an emergency need of speed, the Lloyd George government also proclaimed the resumption of "business as usual" and left the important item of price to supply and demand. Recommendations of technical committees and of the Minister of Health, Dr. Addison, were ignored. Five hundred thousand thoroughly good cottages were to be built, and nothing else mattered except speed.

Great Britain would have had in any case a rise in building costs due to world-wide causes, but it would have been a rise proportional to that in the United States or in Holland, instead of to that in France and Belgium with their devastated areas and depreciated currency.

### Carrying Out the Housing Program

The technical and administrative work of the housing department and its commissioners and of the local authorities, as a class, was beyond all praise. The work accomplished between the passage of the Housing Act and March, 1921, was colossal. The quality of the work will set a world standard for years to come.

Those who talk glibly of "the failure of the British housing program" should remember that it can be called a failure only because 500,000 houses within three years were promised and something less than half that number were built. Even so, the result far exceeds what any other nation has ever attempted. The avoidance of "failures" by the simple method of doing nothing is more easy than admirable.

The following table from the Second Annual Report of the Ministry of Health, showing progress eight months and twenty months after the passage of the Housing Act, is eloquent of achievement.

#### SCHEMES OF LOCAL AUTHORITIES

	End of March, 1920 Acres	End of March, 1921 Acres
Area of sites approved .....	43,441	57,467
House plans approved .....	161,837	275,868
Tenders approved .....	79,536	176,242
Houses in signed contracts .....	40,292	155,599
Number of houses commenced ...	13,355	94,197
Number of houses completed ....	1,239	25,878

#### The Curtailment of the Program

All through 1920, while the pressure for speed was very great, prices rose steadily, until, at the beginning of 1921, a cottage which could be built for £250 before the war was costing £1100 or more. In February the Ministry of Health was approving contracts in large numbers at £950 per house. Dr. Addison suddenly decided the price was excessive and let it be known that he would approve no more contracts for over £800. Within a fortnight, the price had fallen to his figure. For that matter, it has been falling ever since.

The reduction in building costs since the peak at the close of 1920 has been world-wide and unconnected with Dr. Addison. But Great Britain's peak rose to an extra height because of the government's policy, and it was that extra height which collapsed at the touch of an executive order.

In March, 1921, Sir Alfred Mond succeeded Dr. Addison as Minister of Health. No more bids were being approved, but it was generally understood that this was merely delay till prices should fall still farther. In July the Prime Minister decided to arrest the housing program where it was, i.e., to approve no more contracts and to side-track the slum clearance plans beyond what could be carried out with a national grant of £200,000 a year. Dr. Addison, who had remained in the cabinet as Minister without Portfolio, resigned in protest. He has since written an illuminating little book, *The Betrayal of the Slums* (1922).

A still franker arraignment of the Lloyd George government has been published under the title of *The Housing Question*, by a Former Housing Commissioner (1922).

### The Need for Retrenchment

That there was need for retrenchment in British national expenditure cannot be disputed.

After a brief era of prosperity and expansion following the Armistice, Great Britain fell into the financial depression from which she is still suffering. Unemployment became tragically prevalent. The working classes needed houses as much as ever, but they needed work and food still more. Times were very bad, and the tax-payers were demanding relief. Few Americans realize how heavily the Briton of small means is burdened by taxation.

The exemption limit for a married man and his wife is only £225 with £36 for the first child (£27 for

the others). The rate of taxation for the first £225 of taxable income is  $2\frac{1}{2}$  shillings on the pound (3 before 1922), or  $12\frac{1}{2}$  per cent. After that, it is 5 shillings (6 until 1922), or 25 per cent. A married man with one child and a salary of \$3000 in the United States enjoys an exemption of \$2900 (\$2200 before 1922) and pays an income tax of 4 per cent on the balance, or \$4 (\$32—previous to 1922). In Great Britain his exemption would be only \$1215 and his income tax would amount to \$314. Even the man with a \$1500 income, wife and one child, would have to pay \$35.43.

In response to the tax-payers' demands, the Geddes Committee was appointed to suggest ways of reducing the budget. It suggested various economies much more extensive than could be obtained by sacrificing the rest of the housing program, but they would have interfered with the foreign policy of Mr. Lloyd George in Mesopotamia and Egypt. Something had to be thrown overboard to appease the tax-payers. Housing was selected.

### The Housing Act of 1923 (July 31)

Shortly before the Parliamentary election of November, 1922, every candidate received a letter from the National Housing and Town Planning Council containing the following paragraphs:

"Do you agree that it is the duty of the Government—acting in cooperation with the Local Authorities of the United Kingdom—to prepare and submit to the next session of Parliament a comprehensive long-run

housing policy to be carried steadily into effect during the present generation with, as the definite goal of achievement, the cleansing of this country from the disgraceful housing conditions which at present prevail?

"The replies to this question, which has been specially framed to deal with the issue on the grounds of principle rather than on points of detail, will be communicated to the Press Association."

One of the first acts of the Bonar Law government was the appointment of a Cabinet Committee to decide upon a national housing program. It can hardly be denied, though, that they tried to temporize. Their interest in retrenchment outweighed their interest in housing. The result was the defeat of three members of the cabinet in rapid succession at by-elections,—a wholly unprecedented occurrence. If anyone doubted that housing is a live issue in British politics, that doubt must have been removed. The Ministry was working in earnest on a housing bill, when Mr. Bonar Law's health forced his retirement, and Mr. Baldwin was called on to form a new cabinet. Mr. Neville Chamberlain, the new Minister of Health, who has long been a close student of housing, made it his first business to draw up a housing bill, which was introduced in Parliament April 11, 1923.

It reversed the policy of the 1919 Act by making the contribution of the national government a fixed subsidy of £6 per house per year for twenty years, leaving it to the Local Authorities to make up the deficit, if any, themselves.

The bill was sharply criticized because of the small maximum size fixed for subsidized houses and was amended to correct this defect. It was also criticized for the failure to limit the number of houses per acre or, indeed, to continue the established central control of standards, but on this point the government would not yield. Those who do not approve of subsidizing private builders objected also to the inclusion of that feature in the bill. To many of us, it seems the most expensive and least socially useful mode of procuring houses that has been devised. It can hardly justify itself on scientific grounds, but appears to be simply a sop to business interests.

Slum clearance is substantially encouraged by a provision for the national government to bear half the resulting net loss.

These, then, are the three main features: (1) fixed subsidy of £6 per year per house to local authorities; (2) flat subsidy to private builders; (3) 50 per cent subsidy on slum clearance schemes. There are provisions for a certain amount of tax exemption, some help is extended to the Public Utility Societies, and the extension of time for town planning has already been noted.

Before the bill had emerged from the Report stage, more than a hundred local authorities had prepared tentative housing schemes under its provisions and had them tentatively approved. If the Ministry maintain their promised control over materials' prices, there is little doubt that the building program will soon be once more in full swing.

### The Work Already Accomplished

The magnificent work that has been accomplished since the war, for health, happiness and good citizenship through even the partial realization of the British housing program must be seen to be adequately appreciated. Imagination fails before such large figures. The National Housing and Town Planning Council estimated that by July, 1923, 250,000 dwellings would have been built under the 1919 Act. That is counting some 40,000 houses by private builders with flat subsidy (aggregating about £10,000,000) and 4500 houses by Public Utility Societies. The number to which local authorities in England and Wales were limited was 176,000. The remainder would be in Scotland, where permission was obtained to continue building until 1924, and where 20,000 dwellings were then completed or under way. The private builders' houses have been occupied by middle class tenants, but that has presumably helped somewhat to relieve the pressure below.

I could not get over marveling in England, not so much at the indisputable beauty of the half dozen big "show" places, as at the excellence of the general average of the innumerable small schemes scattered through the country. There are between 4000 and 5000 housing schemes carried out by more than 1700 local authorities, urban and rural. You can't go anywhere by rail or automobile, or even for a walk in the country, without seeing them.

I spent a few weeks at a little village in Essex, with about 1200 inhabitants, called Great Baddow. It was

building 50 six-room-and-bath semi-detached brick and stucco cottages.

Our nearest railroad station was at Chelmsford, the county seat, a town of 20,000 inhabitants, containing the Marconi works and several other large factories. The town authorities had bought a tract of 119 acres in the early days of the housing program and planned a garden suburb, to be known as Boarded Barns, with 1000 dwellings. The 1921 halt caught them with contracts signed for 280 only, so they could go no farther for the present. But 280 houses, eight to the acre, in a garden suburb layout, make quite a settlement. Notice that Chelmsford had planned to build new houses for about one quarter of its entire population, and that, even as it was, it built for 7 per cent of them. These cottages rent at 11 shillings 6 pence and 12 shillings 6 pence a week, which, with the rates added, brings them almost to one pound. In some cities (Birmingham, for instance) 10 shillings is the maximum rent, but this required a court decision, as the Ministry of Health naturally prefer to keep rents higher.

Chelmsford town officials were not new to housing. They had built 144 houses before the war, with small gardens, but no other open spaces. These houses rent for 7 shillings and are entirely self-sustaining.

I have described Great Baddow and Chelmsford, not because they are unusual, but because they are typical of English villages and small towns. The big cities build more houses in larger garden suburbs. The standard is everywhere the same.

### The Work of the London County Council

Going to the other extreme in the matter of size, we find the London County Council has been building on a large scale and with a high degree of excellence.

The London County Council has had a long experience in housing. It was created in 1889 to succeed the Metropolitan Board of Works. The older body, during the period 1876-1884, had cleared 42 acres of slums, and during its last years of life had started six more schemes aggregating 15½ acres. But it had not, itself, built dwellings. It had turned over the cleared and replanned sites to others, largely to the philanthropic housing foundations, which put up big block tenements.

The London County Council at once inaugurated the policy of doing its own building. Part of this was to rehouse population displaced by later slum clearance schemes, a smaller part to rehouse those displaced by other improvements, such as bridge or railroad terminals. But the greater part (and a part progressively important) has been to provide new housing accommodations under Part III of the 1890 Act.

Nothing could show better the rise in the standard of living of the British working classes than the history of the London County Council housing, starting with its legacy of dreary, barrack tenements, and progressing by way of lower and more cheerful tenements, via cottage flats, to the present single-family cottages in pairs and groups, with garden-suburb layout, with parks, playgrounds, tennis courts, and fields for football and cricket. They started out with two- and



OLD OAK ESTATE, BUILT BY THE LONDON COUNTY COUNCIL.



three-room apartments, water at a tap in the hall, toilets in the cellar, lighting by oil lamps. It seems a far cry from that to the five- and six-room cottages of today with their well appointed bathrooms, hardwood floors, electric lights, and rose gardens. But thirty years have brought it about. If another thirty years extend this standard to all the British working class (as I believe is bound to occur), we shall see the whole of Great Britain with a death-rate of 7 or 8 per thousand, instead of just Port Sunlight and Bournville and Letchworth.

Up to the outbreak of the war the London County Council had built accommodations for 59,000 people in 10,000 lettings. Of these, 6543 were in tenement houses, nearly all three- and four-room apartments (counting the scullery). Of cottage flats there were 327. The remaining 3121 were single-family cottages built on cottage estates,—i.e., with garden-suburb layout. Of these, Totterdown Fields (at Tooting in the southwest) was the most extensive of the early ones, containing nearly 39 acres and housing nearly 9000 people. The latest and most attractive schemes, White Hart Lane to the north (Tottenham), and Old Oak Estate to the west (Hammersmith) were in process of development when halted by the war.

In July, 1919, the Council decided, within the next five years, to erect not less than 29,000 dwellings for a population of about 145,000. For this purpose, it intended to continue building on Old Oak, Norbury, and White Hart Lane Estates, which it already owned, and to acquire five new estates, Grove Park and Bel-

Lingham in the southeast, Roehampton and Castelnau in the southwest, and the huge Dagenham or Becontree Estate in the northeast.

This last was a market garden district in Essex County, ten miles from the center of London, comprising about 3000 acres, and destined to contain 20,000 cottages, or a population roughly of 100,000. The government's halt in the subsidy program stopped Becontree at 2874 dwellings and the total County Council program at 7283. According to the unnamed former Housing Commissioner who wrote the little book already alluded to (*The Housing Question*), permission was subsequently obtained to complete Becontree.

Becontree will be, undoubtedly, the largest state housing venture, and also the largest dormitory town in the world. Also, it will be the largest human aggregation without slums. Its houses present considerable variety of aspect. Some are of red brick, some of yellow, others of brick covered with cement. This, again, is sometimes plain and sometimes rough-cast. This last is nearly always done by hand in England and very well done. They have tried our concrete guns, but don't like them. Many houses are built of Winget blocks, made of coke refuse, cinders, ashes and cement. Some are left in the gray block and others covered with tinted cement. Roofs are of red tile or blue slate. The brick walls are nine inches thick including an air space. Concrete walls, always double, occupy a little more space. Interior partitions are of



THE PLEASANCE, ROEHAMPTON.



thin (approximately two inch) slabs made of coke breeze and cement, very light and porous.

There are a few cottage flats of three and four rooms (counting scullery) and bath. The great majority are cottages of from four to seven rooms and bath. The scullery contains sink, wash-tubs and "copper" for boiling the clothes, also a small gas range, which tends to turn it into a sort of summer kitchen. The floor and that of the bathroom are cemented. Other floors are of oak. A range is always found in the living room, and in a few houses an experiment in what they call "central heating" is being tried out, consisting of very small radiators in two or three rooms supplied with hot water from the range. Otherwise the standard provision for heating, aside from the range, consists of open fire places in the parlor and in one or two of the bedrooms. There are no cellars, but always a closet for coal, and a good provision of clothes closets and cupboards.

As there were no trees on the estate to start with, it will be some years before Becontree Heath can acquire the charm given to Old Oak Estate and Roehampton by their venerable trees. The layout and architecture at both of these estates is extremely good. Roehampton has a small pond surrounded by dense woods, which are being preserved as a park. The estate is bordered on one side by a wooded belt with a row of houses facing on it most delightfully. Elsewhere are quiet little *culs-de-sac* with four or six houses facing on a small green, and a group of big trees closing the end.

To the Council's architect, Mr. G. Topham Forrest, belongs the credit of the layout as well as the cottage design of all these recent developments.

The London County Council is not the only public authority building houses in London. The City Corporation, the various Metropolitan Borough Councils, and suburban local authorities within the Metropolitan Police District had expected to build about 44,000 dwellings. The halt cut them to 18,800. Less than 1000 houses built by Public Utility Societies and about 8000 by private builders bring the whole post-bellum subsidized housing production for greater London to about 35,000 dwellings. The completion of the Becontree scheme will make it something over 50,000.

To sum up: Great Britain has set the highest housing standard for her working classes, and done the most to realize it, of any nation in the world. No where else is public opinion on housing questions so active or so highly developed.

## CHAPTER IV

### HOUSING IN BELGIUM

#### Belgium's Recovery from the War

A traveler's first impression on landing in Belgium at the present time is of a well-conducted bee-hive swarming with activity. Everybody is cheerful, everybody is busy. A great deal of building is going on—not simply the government-aided production of dwellings, but building of a commercial and industrial character. There seems to be no unemployment. Moving picture houses are thronged. The shops are full of customers.

Of course, Belgium is suffering from a depressed currency and from inflated prices, but her recovery from the war is wonderful, and the spirit of her people compels admiration.

There is little known in the United States of the great work undertaken by the Belgian government to meet the housing shortage and to improve the living conditions of the people. It has been widely reported, to be sure, that Belgium is making excellent progress in rebuilding the districts laid waste by the war. War damage occurred in 241 communes, which have been temporarily "adopted" by the national government. The work of reconstruction is carried on by a specially

created Office of the Devastated Areas, under the Ministry of Economic Affairs. At the end of 1920, 31,000 of the 80,000 houses wholly or partly destroyed had been rebuilt. Early in 1923, the number was nearly 75,000.

I visited Ypres in November, 1922, and it was as though a dead city had risen from its grave. The analogy of a personal resurrection really holds, for street by street, house by house, almost brick by brick, old Ypres was being reproduced. The only exception was in the case of workingmen's dwellings, where cottages in garden suburb setting at Ligy and Kalfvaart were taking the place of old houses that did not deserve resurrection.

### The Housing Law of 1919 and the National Society

Entirely apart from this emergency work of unquestioned urgency in the devastated districts is the activity of the *Société Nationale des Habitations et Logements à Bon Marché*, created by a housing act passed on October 11, 1919, and put into effect by a royal decree of April 29, 1920.

This National Society, like the United States Housing Corporation, is an organization formed by and representing the national government. Unlike it, however, it is an advisory and financing body only. It builds no houses itself, but stimulates the creation of local or regional societies, which do the work. At the close of 1922, 210 such societies had been formed and approved.

Two field secretaries have been kept constantly trav-

eling through the provinces, addressing local meetings, stimulating lethargic communities, encouraging the timid, advising the inexperienced, showing plans, layouts and lantern slides of English Garden Cities and Dutch garden suburbs, as well as pictures of the best that Belgium has produced. They call attention to all the noxious weeds, from tuberculosis to Bolshevism, which flourish where housing conditions are bad, and they explain day in and day out the nature and extent of the offered government aid.

The Belgian housing policy is, fundamentally, one of national aid in the form of credit and of national stimulation and guidance through the control of this credit. This policy antedates the war. It had been decided on and actually voted for by the Chamber of Deputies early in 1914, but had to be laid away in cold storage until the war was over. By that time, it was necessary to add another feature to it, that of subsidy, because of the extraordinary rise in building costs. Building costs rose to six times the pre-war figures at their highest peak and are about three and a half times as high even now. This condition made it impossible to build houses for working people for which an economic rent could be charged. But subsidy forms no part of the permanent housing policy. It is given to meet an emergency and will be discontinued as soon as the emergency passes.

The subsidy amounts to one-fourth of the cost of the houses as an outright gift, besides the loss involved in lending money at 2 per cent for which the government has to pay from 5 to 6. It is the local govern-

ment (commune) and the private subscriber, however, not the national government, who are the residuary legatees for ultimate losses. This fact supplies a motive for balancing the budget, which the British local authorities did not have under their 1919 act.

In fact, the whole scheme is quite different. The great bulk of the work being done in England is municipal housing—planned and carried out by the local authorities. None of the Belgian housing is. Their local housing societies are unique mixtures of private initiative and public authority. Take this summary in regard to the first 176 societies. Their capital stock aggregated 154,751,850 francs on July 31, 1922. Of this 16.60 per cent had been subscribed by the national government, 15.55 per cent by the provinces, 39.87 by the communes, 4.85 by public establishments (such as charitable institutions), 10.14 by employers and 12.99 by other private citizens. They had a borrowing power (from the national government) of 750 million francs, of which 225 million had already been allotted.

All those who subscribe to the stock are represented on the board of directors, but the actual management of local enterprises is largely in the hands of the private citizen group.

Belgians are a very independent and individualistic people, impatient of bureaucracy and jealous of central control. A considerable amount of diplomacy has to be used by the National Society in order to keep its vigorous offspring, the local societies, moving in the paths they should tread with the maximum of speed

and efficiency and the minimum of friction. The success achieved testifies to the remarkable personal qualities of the president of the National Housing Society, Senator Emile Vinck, who has been ably seconded by the managing director, Mr. A. Van Billoen.

### The Housing Shortage

The housing shortage in Belgium (aside from the 80,000 dwellings destroyed during the war) has the same causes as elsewhere,—the complete cessation of building during the war, the high cost of labor and materials after the war, coupled with the general belief that there must soon be a drop, and the rent-limitation decrees which removed such incentive to construction-at-any price as might have resulted from unrestricted profiteering.

As to the precise extent of the Belgian housing shortage, official estimates vary from 150,000 to 250,000, including the war wreckage. For a country with only seven and a half million inhabitants, this constitutes a very serious problem.

### Number of Houses Built

To the end of 1921, the local societies had built 7539 dwellings, of which 4274 were single-family cottages and 3265 were apartments. During 1922, 10,300 dwellings were completed, and 5000 begun. For 1923, 7000 more were planned.

During the years 1920, 1921 and 1922, the government has lent and expended 175 million francs, through the National Society, on the construction of

these houses. An appropriation of an additional 100 millions is included in the budget for 1923.

Belgium needs, of course, to economize, but the consensus of opinion seems to be that public health is not the place to begin, and the dependence of public health on housing conditions is fully recognized.

### The Housing Standard

Meanwhile the good work goes busily on. Garden suburbs containing hundreds of cottages for working people are being laid out all over Belgium. Groups of ten or twenty houses are being put up on smaller available parcels of land in built-up sections. The National Society advises—and obtains—a general standard of 30 dwellings to the hectare, which is the same as the English 12 to an acre. Every family has space in front for flowers and in the rear for vegetables, and there are additional allotments for those who wish them. In the larger cities, where the cost of land or the customs of the people preclude individual dwellings, the Belgian societies are erecting a series of four-family, four-story houses around a hollow square, comprising the whole block, so that there is room in the center for playgrounds, garden allotments, trees and parking. As the houses are only two rooms deep, there is ample light and air for every room.

In view of the excessive building costs and Belgium's financial situation, the degree of approximation to the British housing standard attained by the Belgian cottages is remarkable. The omission of the bathroom is the most obvious difference.

### The Mode of Procedure

The mode of procedure is something as follows: A group of people in a town decide, either spontaneously or after tactful prodding from the National Society, that their working people need more houses. An estimate is made of the number and probable cost of the houses to be provided. A large meeting is held, the mayor or the provincial governor being asked to preside, and a housing society is organized. The capital of the society is fixed at one-fifth of the amount which it is calculated will be required. Articles of incorporation, for which standard forms are printed by the National Society, are drawn up and adopted, officers are elected and capital is subscribed by the Province (usually  $1/5$  of the whole), by the Commune ( $1/5$  or more), by charitable societies, employers of labor and philanthropists, enough to bring the total subscription to  $4/5$  of the whole. Everything is then submitted to the National Society, which, if it approves, subscribes the remaining  $1/5$ . The land to be built on is selected and acquired. Often it is contributed by town, individual or institution in lieu of cash subscription. Where it has to be purchased, the process has been greatly facilitated by an additional act passed in July, 1921, granting to the National Society the right of expropriation. The right will be sparingly used if at all, but the mere fact of its existence has made owners much more tractable. Perhaps a competition is held for the layout and design of the houses. Belgian architects are becoming expert in these matters, and competition is keen. All subscribers pay in 20 per cent of

their subscription when the society is organized. The next step is to negotiate a loan from the National Society for five times the amount of the company's capital (in other words for the whole calculated cost of the development), which is paid in installments as the work proceeds. These loans are made for 66 years, at 2 per cent, with  $\frac{3}{4}$  per cent additional for the sinking fund and  $\frac{1}{5}$  per cent to pay the expenses of the National Society—an annual charge of 2.95 per cent in all. The unpaid-up 80 per cent of the capital subscribed forms a reserve for emergencies. If there are any profits remaining, dividends of not-to-exceed 5 per cent can be declared on the paid-up capital. So long as building costs remain such that economic rents cannot be paid by working people on new houses, the National Society proposes, as already explained, to grant not-to-exceed one-fourth of the costs as a direct subsidy—i.e., to write off one-fourth of the loan it has made, so that even the 2.95 per cent is paid only on three-fourths of the money advanced.

### Auxiliary Activities of the National Society

The National Society does a great deal to keep costs down and standards up. An illustrated monthly magazine, *L'Habitation à Bon Marché*, serves it as an educational medium. It is constantly supplying all sorts of information to the local societies by letter, circular, telephone or word of mouth. It has founded a national building materials exchange (*Comptoir Nationale des Matériaux*), which aims to bring dealer and purchaser together. It invites tenders from dealers

in building materials giving reduced rates on quantity orders. These it makes known to the local societies, and helps them combine their orders so as to benefit by the reduced rates. It buys and sells nothing itself, but acts as a very valuable connecting link in exchange and prevents the local societies from bidding against each other.

Another activity of the National Society is the experimental work in new building materials carried on at Anderlecht, in the outskirts of Brussels, by the Society's architect, Mr. Eggericx. Many kinds of materials have been tried out, but the net result has been to confirm the use of bricks in districts where good brick clay is found and to encourage the use of blocks made of nine parts cinders and coke breeze and one part cement in factory districts where refuse of this kind is plentiful. A double wall of these blocks, with air-space between, gives a thoroughly dry interior. As the blocks are made 32 centimeters long by 15 or 20 high and 16 thick, they can be built into a wall much more rapidly than bricks and require less highly skilled labor.

I noted a supply of American factory-made doors at the experiment station and a few window frames. There were not, however, particularly good specimens, and were being used to overcome a passing shortage rather than for either cheapness or quality. The unfavorable rate of exchange, in fact, makes purchases from America almost prohibitive. On the other hand, the pecuniary inducement to purchase in Germany is very great, and the struggle between the Belgians' need

to cheapen construction and their aversion to dealing with their late invaders, produces many controversies.

### Shall the Houses be Rented or Sold?

Under the original regulations of the National Housing Society, all houses built by the local societies must be rented, not sold. The reason for this was that it would be unfair to a workingman to encourage him to buy a house at its present high cost, which will probably be worth much less ten years from now. Even after the national government's 25 per cent gift was written off, it would be far from a good investment. Moreover, though with his present high wages he might be able to manage the payments, when the expected drop comes, he would be unable to keep on.

By Royal Decree of October 14, 1922, however, a new policy was inaugurated, permitting the sale of dwellings built under the auspices of the National Society and granting subsidies, or premiums, to the first 7500 purchasers of not to exceed 3000 francs, or one-fifth of the cost of the house. The house is to be sold at cost, and the purchaser is not allowed to re-sell it for ten years, except in case of the death of the head of the family, or necessary removal to another city, when permission must be obtained and the premium returned with interest. The purchase must be made in *cash* and the money returned to the National Society.\* The local society which made the sale, if it wishes to continue building, will have the prefer-

\* Special facilities are offered for borrowing up to 80 per cent of the sum needed from the General Savings Bank.

ence over all others in obtaining a new loan equal to the one just returned.

The purchaser of a subsidized house must belong to the class from which tenants are drawn,—*classe peu aisée* (of small means). The definition is based on income, modified by place of residence and number of dependents. Thus, 5250 francs is the maximum income in communes of less than 5000 inhabitants, but in cities of 60,000 and over it may go as high as 9000 francs. A 10 per cent increase is allowed for the wife and for each dependent child. In the case of a widow or widower the allowance per child is increased by one-half. There are restrictions on the taking of lodgers and the sale of liquor.

How much advantage will be taken of these offers is extremely problematical. The action of the Ministry was partly in the hope of obtaining the prompt return of some of the government loan for reinvestment in more houses, and partly in deference to the demands of the conservative group in the Senate.

There is a strong desire for home ownership among Belgian working people, and, except when the Socialist party has been in power, it has been the aim of the government to encourage it.

#### Results Obtained under the Housing Law of 1889

The admirable efforts fostered by the old Belgian housing law of 1889 were directed primarily to the promotion of home ownership. Under its provisions the General Savings Bank made loans which, previous to 1914, aggregated 109,000,000 francs and resulted

in the construction or purchase of homes by 63,000 workingmen. Necessarily suspended during the war, these activities have since been resumed. By the close of 1919, 3000 workingmen had taken advantage of their own high wages and the disgust of property owners over the rent restriction laws, to purchase the houses in which they were living.

In 1920, 6600 dwellings were acquired, in 1921, 5400. These transfers were largely made at prices ranging from 5000 to 10,000 francs. To December 31, 1921, the General Savings Bank had lent a total of 136,419,316 francs for the acquisition of 78,500 houses. A year later, the figures had become 156,497,110 francs and 85,615 dwellings.

Valuable as these transactions have been in increasing home ownership, they have not, since the war, produced any new houses, because of prohibitive building costs. Recent legislation has increased the scope of the bank's activity in respect to housing credits, and it is prepared to play a large rôle, when construction costs are stabilized, in the Belgium of the future.

By Royal Decree of August 14, 1922, a cash premium of the same amount and under the same general conditions as that of October 14, just described, was offered to the first 10,000 persons of the *classe peu aisée* who should build approved dwellings for their own use. In April, 1923, 4922 applications for this premium were under consideration.

Another decree of the same date made it possible for the Savings Bank to finance these transactions by raising the maximum cost of a house on which it could

grant loans to from 18,000 to 25,000 francs, according to the population of the commune in which it was built. The maximum loan is 80 per cent of the cost of house and land or, in the largest cities, 24,000 francs.

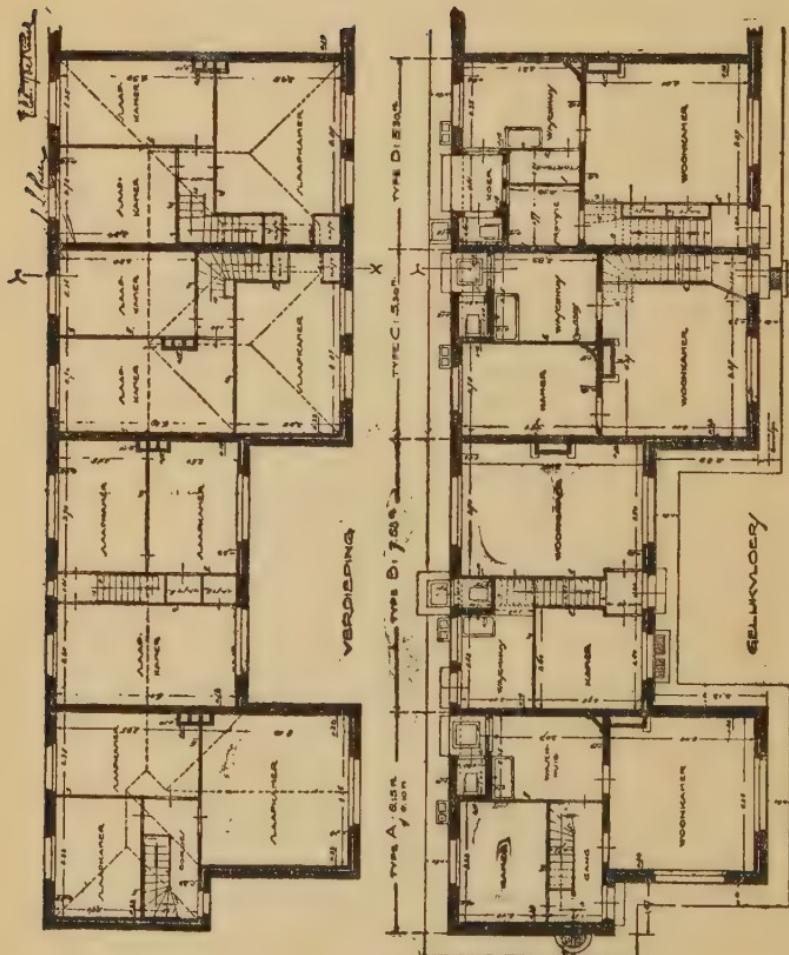
Some account of concrete examples of houses built under the 1919 legislation is now in order.

### **Antwerp**

A good example of an active regional society is the *Goedkoope Woning* of the Arrondissement of Antwerp. It was founded October 30, 1920, and has a capital of over 6,000,000 francs. Its president, Mr. Emile Lemineur, a prominent and public-spirited citizen of Antwerp, has been identified for many years with the housing movement, both as president of the *Comité de Patronage des Habitations ouvrières* and as president of a philanthropic organization, the *Société pour la Construction et L'Amélioration de Maisons d'Ouvriers*. Other members of the board of directors have had similar experience. This point is important, because a group new to the work could not possibly function with the same efficiency.

They decided to start well beyond the city limits building single-family houses in garden suburb settings, hoping to draw as many working people as possible from the crowded city into better air and surroundings. Eventually, they will build in Antwerp too, but there it will be necessary to put up apartment houses.

The first annual report of the Goedkoope Woning



PLAN OF COTTAGES BUILT AT MORTSEL BY THE GOEDKOOPE WONING.



COTTAGES AT MORTSEL, NEAR ANTWERP, BUILT BY THE GOEDKOOPE WONING.



(to December 31, 1921) shows that they are building in 18 different communes, in some cases several separate building schemes being undertaken in the same commune. At the close of the year 312 houses had been completed and 289 of them occupied, their population being 1487. At that date 450 houses were under construction and plans had been completed for 222 more (984 in all). The average cost per house in the different schemes varied from 14,920 francs to 20,900, apart from the land and its development. The houses, in the former scheme (at Borsbeek) have five rooms instead of six (counting the scullery as a room), but prices are going down, and the date of a contract counts for more than the number of rooms. All the houses are of brick (Antwerp is said to make the best bricks in Belgium), and most of them are of red brick. A few are painted white. In some schemes stucco is used as a finish. The roofs are all of red tiles. The society is planting trees, shrubs, vines and grass, and prizes are to be offered for the best kept yards. All the houses have cellars, which add materially to the expense, but are considered a necessity, as it is the custom in the province of Antwerp to lay in a winter supply of fuel, potatoes and many other provisions. In the neighborhood of Brussels, on the other hand, cellars are neither provided nor desired.

The rents of these Antwerp houses run from 60 to 85 francs a month. Taxes and water rates are included. These are, I understand, about the current rents for similar houses and at least twice the pre-war figures. Rents would have gone much higher had it

not been for restrictive laws. Wages have increased considerably more in proportion, but will probably fall before long.

### Liège

The inhabitants of Liège suffered so indescribably during the war that it seems marvelous they should have enough "come-back" for new undertakings. I found them, however, busily engaged in building homes for working people. Near the center of the city where land is dear, they put up five-story apartment houses, in intermediate districts three-family houses, in the outskirts single-family cottages.

*La Maison Liègeoise* is the local housing society which does most of the work. It was organized in January, 1921, with a capital of 6 million francs, of which more than half is paid up. Its borrowing power from the government is, therefore, 30 million. It has been decided to increase the capital to 10 millions in order to be able to borrow 50.

At the time of my visit (late in 1922) 425 dwellings had been finished and occupied, 730 were under construction, and 616 were to be built in 1923—altogether 1771.

The society makes its own bricks—30 million to date. Its cottages run in cost from 20,000 to 22,000 francs. Whether in cottage or apartment, the accommodation usually consists of a large living room and small scullery, a water closet compartment containing an alcove for shower bath, and three bedrooms. The houses have city water and sewer connections.

Gas is used for lighting instead of electricity. Balconies are frequent in the apartments. There is always cellar and attic space. Many of the tenants are miners, who get their coal supply for the winter (gratuitously) all at once, so much space is needed.

*La Maison Liègeoise* has a plan for the showers which is new to me and based on sound psychology. Funds being short, and the skeptical cry raised, "Will the tenants use the showers anyhow?", the fixtures are being installed in only one dwelling out of ten, those tenants being chosen for the favor who seem to be the most intelligent, cleanly and progressive. Nothing more will be done till the other tenants ask for fixtures, when they will be installed very gradually, and always in the homes of the best tenants first. If that system does not make bathing popular, I am very much mistaken. The five-story apartment houses occupy the site of the 1913 Exposition, near the junction of the Meuse and Ourthe Rivers. Extensive steel and rubber works adjoin on one side and a very good middle-class residence district on the other.

In order to avoid monotony (and perhaps, a little, not to show favoritism among local talent), the society has employed nineteen architects on this development and given each his section. This is a practice I have met several times in Belgium, but I cannot conscientiously commend it.

On the crests of the steep hills which encircle Liège, a garden suburb is being built, which will be six kilometers long and contain 643 cottages. Its inhabitants will be chiefly coal miners.

### Genck—Winterslag

One of the best employers' housing developments in Belgium is the garden village at the coal mines of Winterslag, commune of Genck, province of Limbourg, up in the northeast corner of Belgium, near the Dutch border.

The site of the village was open country until the discovery of coal there about fifteen years ago. The oldest houses date from 1910. A large number of new houses are in process of construction. Those that were built before the war are now surrounded by a mass of verdure and flowers,—roses especially,—and the trees planted have grown large enough to shade the roads. To produce these results has been quite a triumph, for the land was treeless and sterile. Nothing grew on it but heather.

The village contains 2000 inhabitants in 500 houses spread over 100 acres. It is on high ground and commands wide views of rolling country.

The Company has built churches and schools, a community building where moving pictures are shown twice a week, public baths, a library, a gymnasium, an infant welfare station, and has equipped an athletic field. Besides the ordinary elementary instruction for boys and for girls, there is a kindergarten and an industrial school where the rudiments of mechanical drawing, electricity and mining can be studied.

Most of the houses are semi-detached or in groups of four or six. All have ample garden space. They run in size from three to six rooms for the miners,



COAL MINER'S COTTAGE AND ROSE GARDEN AT GENCK-WINTERSLAG.



five being the commonest, and from six to eight for the office force.

The great attraction of the village, aside from its airy spaciousness, lies in its roses. Ramblers, especially, run riot over fences, around doorways, and up the walls of the cottages. Great masses of Dorothy Perkins glow around the entrance to the foremen's hostel and make bowers over the little tables where refreshments are served in the garden.

The Queen of the Belgians visited Winterslag not long ago and expressed herself as much pleased with what she saw. When I think of the dreary, grimy aspect of most of our coal mining towns, I do not wonder at her enthusiasm.

### Brussels

Shortly before the war Brussels started on a big slum clearance scheme. One bad spot (structurally and morally) had been cleared, and a series of large tenement houses designed by a distinguished architect, Mr. Hellemans, were being built. They were completed in 1917.

In the outlying district of Laeken, whole blocks of four-story apartment houses are being put up by the *Foyer Laekenois* and other societies. Each apartment has from four to six good rooms, with running water, gas stove, electric lights, water closet, and large rear balconies. They are two rooms deep, with big casement windows. Only one apartment per floor is entered from each stairway. The central court will be almost a park. It will contain garden allotments and

children's playgrounds. Laundries are in the basement. The rent is 52 francs per month, with 8 additional for taxes paid by the tenant. This is another case where variety is sought by employing a number of architects.

Outside the city limits, adjoining the building materials Experiment Station of the National Society, is the pretty little garden suburb of the *Foyer Anderletois*. The layout is conventional, but the 400 cottages are comfortable within and pleasing without. They have an extra half story, which doubtless has made it easier for the architect to handle them in masses without squattiness. They have a large living room, small scullery and water closet on the ground floor, two good-sized bedrooms on the second floor and a third in the attic, which contains also good storage space. There is no cellar. This society specializes in large families. One household which I visited had eleven children and another fourteen.

For sheer charm, however, the most delightful housing project which I saw in Belgium was a garden suburb at *Watermael-Boitsfort*, some miles out of Brussels, which is being built by a tenants' cooperative society, *Le Logis*, at a spot called *Les Trois Tilleuls*.

The name comes from three beautiful lindens which grow where the road to Brussels runs through the property. They have been left in the center of a grassy mound, around which the entering avenue splits and reunites. This *Rond Point* has been made the dominating feature of the ground plan.

The site is a particularly fine one, on the brow of

a hill which slopes steeply to a wooded ravine, beyond which rise other hills. The slope and the ravine form part of the Trois Tilleuls property and will be kept unbuilt on for park and playgrounds: The society owns about 80 acres, on which it expects to build some 700 houses.

The first part to be built on is a triangular tract with one side along the crest of the slope just mentioned and one point towards the Three Lindens. It contains nearly nine acres on which are 93 cottages. Building only began in July, 1922, but the houses were nearly ready for occupancy when I was there in November. Work was shortly to begin on a larger triangle (16 or more acres) on the opposite side of the Rond Point, where 177 houses were to be built.

Two well-known architects have collaborated in the development,—Mr. Auguste Van der Swaelman, who is responsible for the layout, and Mr. Jean Eggericx, of the Anderlecht Experiment Station, who has designed the houses. They have worked together admirably, and the result has real distinction.

The beautiful view over ravine and hills has been kept always in mind and the houses planned to receive the maximum benefit from it. The need of small children for a safe place to play under the eye of a mother busy with household duties has also been remembered, and every house in the development looks onto one or another of the four playgrounds.

All the houses are of brick made on the spot, the clay soil being well adapted to the purpose. All are covered with stucco of a soft khaki shade and all have

red tile roofs. There is a restful absence of ornament. Large simple mass effects are relied on. There are nineteen types of house, whose lines afford all the variety needed. Their cost runs from 21,000 to 30,000 francs.

The one I liked best of all was a 22,000-franc bungalow. It was one of a row along the brink of the hill, getting the full benefit of the wonderful view. Its large living room, with big casement windows, brick chimney place and tiled floor, runs from the front to the back of the house. I found myself, mentally and almost unconsciously, picking out furniture and window draperies for it and thinking that I should like to live there.

The 30,000-franc house had two and a half stories, a large cellar and a completely equipped bathroom. There were six rooms on the first and second floor and two in the attic.

Several new devices are being tried out at Les Til-leuls, one being Russian cook stoves, of which twenty-five have been ordered as an experiment. They are built-in tile affairs, which are said to heat most of the house and supply hot water economically and efficiently.

Some of the houses are being equipped with built-in cement bath-tubs covered with small squares of black and white mosaic, such as we use on bath-room floors. The total cost of such an installation is only 325 francs.

The members of the society are a homogeneous and congenial group of bank and government employees,

accountants, etc. They have to qualify under the *peu ais * income group in order to receive government assistance in the form of loans at reduced interest. They do not get the one-fourth subsidy. At least *Le Logis* and other recently organized societies do not.

### The Cooperative Tenant Societies

These cooperative tenant societies have been the center of a lively controversy, and the end is, perhaps, not yet. They grew up, quite spontaneously, under the urge of the housing shortage, during 1921, and applied to be received by the National Society. A number of them were so received on the same terms as the local housing societies. But the Prime Minister decided early in 1922 that they were not sufficiently "altruistic" to be entitled to so much assistance and debarred them from the 25 per cent subsidy. Senator Vinck, as president of the National Society, championed their cause with his usual energy, but was unable to get the decision reversed so far as the newer societies were concerned. Those which had already been accepted under full privileges were allowed to retain them.

Many of the cooperative tenant societies are composed of clerical workers, others of skilled mechanics, railway trainmen, or similar groups. They are necessarily more resourceful than the tenants of the local societies, since they have to subscribe for 2000 or 3000 francs worth of shares, even though only one-fifth of it need be paid up if all goes well. They must

also take upon themselves the management of the society.

Probably, with falling construction costs, it will soon be possible to build without the subsidy, and then we may look to see a rapid spread of their activities—unless or until the government calls a halt on the 2 per cent loan.

### Summary

Early housing work in Belgium, as elsewhere, was largely in the hands of the conservative or private initiative group. It took the form of promoting home ownership among wage earners.

Good was accomplished, but not enough. The state action group secured legislation in 1914 which was intended to combine public and private activities. Subsidy features were added in 1919. The results have been excellent.

The *Comités de patronage*, unpaid local housing committees, provided for in the law of 1889, have been useful in educating Belgian public opinion to the point of requiring that a good, wholesome sunlit home be placed within the reach of every Belgian working-man,—a home in which healthy children can be reared and a normal family life enjoyed.

## CHAPTER V

### PRIVATE INITIATIVE IN FRANCE

#### **Characteristics of the French Housing Movement**

French public opinion and French legislation in matters of housing are many years in advance of ours. France has, however, in these particulars followed, not led, her more industrialized neighbors, Great Britain, Germany and Belgium, and her volume of accomplishment remains less. Nevertheless, the nation is aroused, and in so far as financial exigencies permit, housing progress from now on is likely to be rapid.

One point peculiar to France which immediately strikes the outside observer is the extent to which housing reform there is linked up with the birth-rate. It is not only a movement to lower death-rates and sickness rates, a means of allaying social unrest, of raising the standard of family life, of fighting intemperance or juvenile delinquency. First and foremost, it is a means of aiding and encouraging the parents of large families (*familles nombreuses*), technically, those with four or more children under sixteen, those whom landlords always discriminate against, and whom France so greatly needs, if she is to maintain her place among the great powers.

In France, as elsewhere, the divergence between the

private initiative and state action group of housing reformers has been marked from the start.

They are, however, agreed that the government must *facilitate* in every way the erection of homes for the people, especially through the provision of credit. The most ardent advocates of private initiative, the most convinced opponents of the extension of government functions, realize that ordinary capital at commercial rates of interest, and the driblets provided by the well-intentioned who voluntarily limit their dividends, are wholly inadequate to meet the exigencies of the situation.

Private initiative in French housing manifests itself in philanthropic foundations, limited-dividend housing companies, joint-stock and cooperative, employers' enterprises, and limited-dividend loan societies which foster home-ownership. They receive government loans and tax exemptions, with a few exceptions, which will be noted. Since the war some of them have, temporarily, enjoyed subsidies as well.

### Legislative Retrospect

1894. The first French housing law was modeled on the Belgian act of 1889. It was brought about largely through the efforts of the *Société française des habitations à bon marché*, founded in 1889, the oldest national society for housing reform. The death of its president, Senator Jules Siegfried, on September 26, 1922, removed one of the outstanding figures of the French housing movement. Madame Siegfried has been equally devoted to it.

The act of 1894 provided loans and tax exemptions for limited-dividend housing societies. It also established unpaid local housing committees, on the Belgian model, and at their head a national body, also unpaid, the *Council supérieur des habitations à bon marché*, whose annual reports afford a valuable record of housing progress.

One of the principal duties of the *comités de patronage* has been to encourage the formation of limited-dividend housing societies and to help them obtain loans. Various public and semi-public bodies were authorized to make loans to these societies, or to subscribe to their shares, including Savings Banks, the National Bank of Deposits, the Old Age Pension funds, charitable institutions, hospitals, communes and departments.

**1906.** The results being less than had been hoped for, the provisions of the housing law were extended and liberalized in 1906. Thereafter, interest in housing increased rapidly.

**1908.** This year marked the passage of the law known by the name of its author, Senator Ribot. Its purpose is to provide loans to facilitate home ownership among wage earners, and the acquisition of a garden plot. Loans are made through the intermediary of a non-commercial loan society (again the Belgian system), which obtains its funds under very advantageous conditions (at 2 per cent interest) from the Bank of Old Age Pensions (*Caisse nationale des retraites pour la vieillesse*).

**1912.** So far everything done in a legislative

way in France had been for the encouragement of private initiative. But in 1912 the government-action group made themselves effectively heard and secured the passage of an act to encourage direct building by communes or departments. It also provided for the establishment of Public Housing Offices (*Offices publics d'habitations à bon marché*). Everything seemed to be gathering headway for extensive undertakings (e.g., a special act in 1913 authorized the city of Paris to raise a loan of 200 million francs for housing purposes), when the war put an end to all such activities.

Since the war a number of important legislative acts have been passed.

1918 and 1920 saw amendments of the 1908 act to facilitate the acquisition of small rural holdings by disabled soldiers or war widows.

31 March 1919 was the date of the act which provides, temporarily, in view of abnormal building costs, a government subsidy, not to exceed one-third of the total cost of houses built by Public Offices, communes, housing societies, or other approved institutions, provided at least two-thirds of the dwellings are occupied by large families.

24 October 1919, amended 26 February, 1921, concerns government loans to Public Offices and to housing societies. The loans are made through the National Bank of Deposits (*Caisse national des dépôts et consignations*) at 2 and  $2\frac{1}{2}$  per cent and may reach as high as 75 per cent of total cost under certain conditions. But the combined subsidy and loan cannot

exceed 85 per cent of total cost. The Public Office or the private company must, therefore, provide a minimum of 15 per cent of total cost out of its own resources. The sum total of subsidies and loans is limited for the present to 300 million francs. The competition for them is keen.

**14 March 1919.** This is the compulsory town-planning law which attracted considerable attention in the United States when it was passed. It required plans to be prepared before 1923 (recently extended to 1926) by all towns of over 10,000 inhabitants, all towns wholly or partially destroyed, and by health resorts, places of historic interest and places of especially rapid growth. A national board was created (*Commission supérieure d'aménagement, d'embellissement et d'extension des villes*) under the chairmanship of the Vicomte de Cornudet, to carry out its provisions.

In the non-devastated regions, enforcement of the law is a matter of education, as there are no penalties for non-compliance. In the devastated regions, however, no advances on reparations are made by the Ministry until a plan has been submitted and approved.

For the smaller places, a simplified procedure was adopted which caused little delay. For the larger towns, it was found necessary to approve the main points in order not to hold up necessary work on water systems, sewers or streets. The complete process seems to be a very tedious one, as only four cities (Rheims, Cambrai, St. Quentin and Armentières) up to the time of my inquiry had had their plans recog-

nized by decree of the Council of State, while two more (Amiens and Avion) and an amendment for Rheims had passed all but this final stage.

This was the situation on October 31, 1922. I understand Verdun was added shortly afterwards. Twenty-one other cities had plans in process of revision at that date, and six more had submitted plans which had not been acted on. Nineteen of these thirty-four cities are in the devastated regions. The largest of those outside is Brest.

Mr. George B. Ford, of New York, was the author of the plan for Rheims.

**5 December 1922**, a long-desired consolidation of previous housing laws was passed, its provisions being conveniently grouped under ten heads.

### The Foundations

Five philanthropic housing foundations have been recognized as being "of public utility." The most important are the Lebaudy and Rothschild foundations, both of Paris. They date respectively from 1899 and 1904.

These foundations are eligible for government loans and subsidies, but have not used them. They have benefited by the twelve-year tax exemptions. On the other hand, they were badly hit during the war by the rent moratorium. Two-thirds of their rent during that period remained unpaid. Taxes, repairs, water rates greatly increased, but the war legislation prevented their increasing their rents, which had only been calculated to pay 3 per cent net. Out of these small

accumulated surpluses, the war deficits were paid, and since 1919 a slight surplus has been shown again each year. In view of these conditions, the foundations are not starting new building operations, though both have completed groups of buildings begun before the war.

Both foundations deal solely in multiple dwellings. These are in many ways an improvement over the older block buildings of London or the model tenements of New York. The courts are extremely large, every room is bright and airy, stairs and halls are well lighted, and the general architectural appearance of the buildings is almost invariably good. There are trees and shrubs, sometimes grass and flowers in the courtyards, though most of the surface is paved.

The worst point about these buildings is their height,—seven and occasionally eight stories,—but it is a characteristic they share with great numbers of Paris apartment houses.

Communal baths and laundries are provided and run at a loss. The Lebaudy system is to charge each family ten francs a month additional, which entitles each member to a weekly tubbing or shower and the family to a half-day use of the laundry once in a fortnight. The latter is ample, because the modern devices for boiling, rinsing and steam-drying are great time-savers, and the housewife does the ironing in her own apartment. Indeed the laundry system is admirable, and the old problem of where to dry the clothes (roof, courtyard, window or room) is happily solved.

Both foundations run various social services on a less-than-cost basis, especially the Rothschild Foundation, which has day nurseries, after-school classes in cooking, carpentry, etc., for older children, dispensaries, and even maternity rooms and mortuary chambers.

The capital of the Rothschild Foundation amounts to about  $16\frac{1}{2}$  million francs, of which 15 million represent gifts from various members of the Rothschild family, and the remainder accumulated surplus. It has constructed five groups of buildings, containing 1122 apartments, mostly of three or four rooms and toilet, renting for 400 or 500 francs a year, and accommodating 4669 persons, of whom 1554 are children under 16.

The Foundation of Madame Jules Lebaudy (called *Fondation groupe des maisons ouvrières* until after the death of its benefactress in 1920) disposes of a capital of 21 million francs. It has built ten groups of houses, which shelter over 5000 people, of whom over 2000 are children. The size of apartments and the rent are much the same as in the Rothschild Foundation.

Two Lebaudy experiments should be noted. The first was the fitting up of the whole top floor of the buildings at 6 Rue Cronstadt, in single rooms, with large kitchens and sitting rooms for general use. This was done at the request of a trade union of women needle-workers, whose unmarried and widowed members took over the entire floor. Each pays 260 francs

a year for a good-sized bedroom and the use of the common facilities.

Again, a short distance from the Saida buildings, to which no family is admitted with less than four children, a quiet, low structure has been put up containing kitchen and bedroom apartments for elderly childless couples. I was told that there are about 26,000 such couples in Paris, not eligible for special trade or professional homes, not in any sense paupers, in most cases small *rentiers*, hard hit by the Russian *débâcle*, and the war, and the cost of living. Such apartments, it appears, should be greatly multiplied.

#### Limited Dividend Housing Societies (Sociétés d'habitations à bon marché)

There are 487 approved housing societies in France, of which 204 are of the joint-stock, or philanthropic variety, and 283 are cooperative.

These societies, like the foundations, passed through difficult times during the war and some went under. Most, however, survived, and with falling building costs and the stimulus of government subsidy and loans, many are starting on a career of renewed activity.

Of considerable historical interest is the story of the *Société anonyme de logements économiques* at Lyons, which is commonly known as the Mangini Society, from its founder, the engineer, Felix Mangini.

He became convinced that sanitary apartments could be built and rented at the prices charged for slum property, and return a sure four per cent, if it were

done in a businesslike way and on a large scale. In 1886, with the help of his brother Lucien and his friends, Mr. Aynard, a banker, and Mr. Gillet, a manufacturer, each of the four contributing 50,000 francs, a successful demonstration was made by erecting, at a total cost of 148,000 francs, five five-story houses in the Guillotière quarter, where congestion was worst, each containing twelve two- and three-room apartments, renting at 72 francs a year per room.

In 1888 a joint stock company was organized with a capital of a million francs, half of which was subscribed by the local savings bank (*Caisse d'épargne et de prévoyance du Rhône*), which received proportionate representation on the board of directors.

According to the last (1922) report, the capital of the society is now five million francs. It owns 157 buildings in 37 groups, containing 1861 apartments, renting at an average of 327 francs a year. The monthly rent of a three-room apartment which I visited was 35 francs and that of a two-room apartment in an older building was only 17 francs.

No building was done during or immediately after the war. One house containing twelve apartments is now being built as an experiment. Rents in it will necessarily be higher.

This society operates on a simon-pure private initiative basis, if we class the cooperation of the savings bank as private. It has never received any government help in the form of loans, subsidies or even tax exemptions.

Characteristic of later tendencies, may be cited the

*Société anonyme démocratique des habitations hygiéniques à bon marché*, also of Lyons, founded in 1911, with a capital of 400,000 francs, under the presidency of the Mayor, Mr. Edouard Herriot, to take advantage of the various forms of state assistance. The war interrupted its activities when it had erected one group of buildings containing 154 apartments of two, three and four rooms.

Another Lyons organization, the *Espérance du foyer*, will serve as an example of the cooperative societies. It was founded in 1910 with 122 members. Fifty-two houses for as many members had been completed before the war. They are excellent houses, detached and semi-detached, with bathrooms and other improvements, mostly grouped on a property called La Corniche, on the heights overlooking the city, which they are developing on garden suburb lines. Building has recently been resumed, and all the shareholders will eventually get their houses,—not, however, at pre-war prices. A few skilled mechanics figure among the members of this society, but the majority are office employees, professional men, and the like.

### The Foyer Rémois

When I was in Rheims in July, 1922, it was my privilege to meet Mr. Georges Charbonneaux, president of the *Foyer Rémois*, and to visit the very charming garden suburb of *Chemin Vert*, which owes its existence to his energy, devotion and generosity.

Mr. Charbonneaux is a firm believer in private initiative, but so far as any adequate solution of the hous-

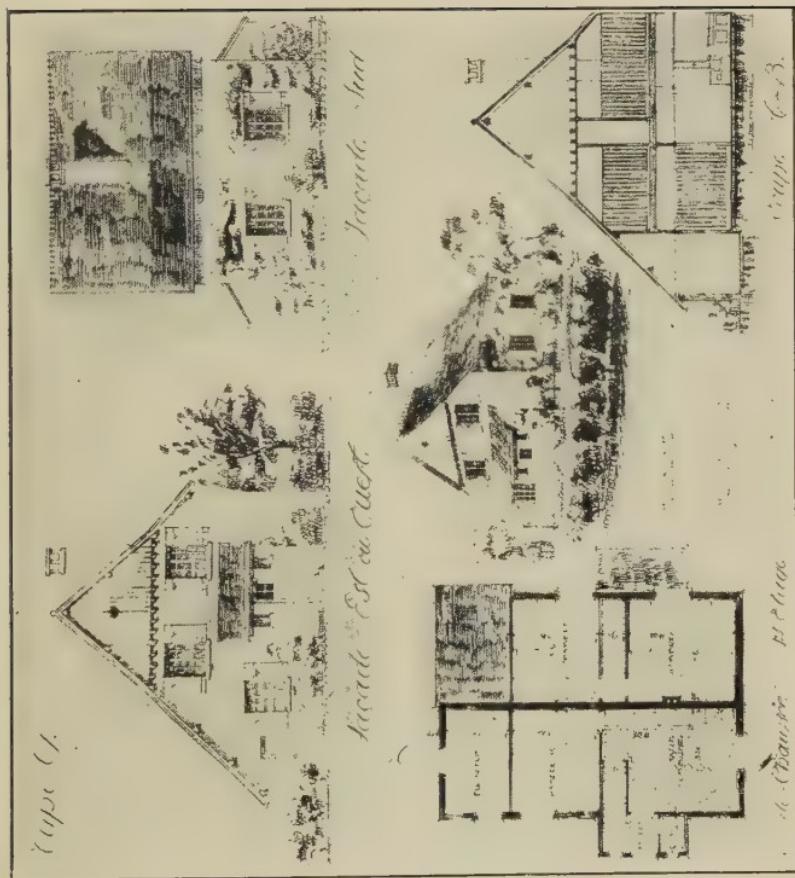
ing problem is concerned, he is convinced that it must be supplemented by abundant government loans on generous terms.

Chemin Vert is built on high ground overlooking the city of Rheims. Its axial street, as one looks along it, frames a beautiful view of the cathedral towers. Layout and house plans are the work of a distinguished Parisian architect, Mr. J. M. Aubertin. The tramway company is to build a branch connecting it with the center of the city. The only drawback to the site chosen is the absence of trees. They have been planted, as well as grass, shrubs and flowers, but it will take time to produce the desired effect.

A very special—and successful—effort has been made to give variety and cheerfulness of aspect. The houses are covered with rough-cast stucco in warm gray, deep cream or light golden brown. The roofs are of red or mottled tiles. Doors, shutters and window casings are variously and always gaily painted, red, blue or green. After four years of bombardment or exile and four years more of living in provisional shacks in the midst of indescribable ruins, there is no doubt that the *sinistrés* of Rheims need cheering.

When I was at Chemin Vert, about half the houses were occupied, and the rest nearly ready for their tenants. There are a few two-family flats, with a four-room apartment on each floor, but they are not as well liked as the two-story cottages. A certain number of cottages, intended for office employees rather than industrial workers, have a parlor and kit-

TYPE OF SEMI-DETACHED COTTAGE AT CHEMIN VERT, RHEIMS,  
BUILT BY THE FOYER RÉMOIS.





chen instead of the big living room (*salle commune*) and rent for 70 francs a month.

The notes which follow are translated and condensed from an unpublished memorandum kindly furnished to me by Mr. Charbonneaux:

"The *Foyer Rémois* is a joint-stock housing society for *familles nombreuses* founded in Rheims by a group of philanthropic citizens, in 1912, with a capital of 1,250,000 francs. Its statutes prohibit the payment of dividends in excess of 4 per cent. As a matter of fact, it has distributed nothing since its creation except a dividend of 1 per cent during two years.

"Its aim was to build, in the course of a dozen years, enough good, sanitary, one-family houses to accommodate *all* the big families of small means in the city of Rheims,—to the number of 1025. Thirty-six houses had been completed and 80 were under construction when the war broke out. All of the latter and most of the former were demolished by the bombardment.

"Rebuilding was started as soon as possible after the Armistice and, in spite of great obstacles, completed in July, 1919. It was felt, however, that the prompt completion of the whole project was urgently needed, and the directors decided to build two garden suburbs at opposite extremities of the city, one containing 600 and the other 400 dwellings.

"For the first, 45 hectares (112½ acres) were purchased on the Boulevard Pommery and called the Cité du Chemin Vert. For the second, 30 hectares (75

acres) were secured on the Boulevard Charles-Arnould.

"There were many difficulties to overcome. To secure sufficient funds for the project it was necessary to obtain a large loan from the Bank of Deposits.\* But it was necessary first to amend the existing law which allowed substantial favors to societies building low-cost houses (*habitations à bon marché*), but defined low-cost houses as those whose price did not exceed 9000 francs. Such a price was impossible after the war, as the cost of construction had quintupled.†

"Authorization to build and to employ the *tout-à-l'égout* ‡ system for the evacuation of sewage had to be procured from the city of Rheims, whose reconstruction plan had not yet been adopted.

"It was near the end of 1920 before all these obstacles had been surmounted and the society could start to work. Building materials being very difficult to procure, cement blocks and tiles were made on the spot, and carpenters' shops were installed for the wood work. Narrow-gauge tracks (Decauville) were laid along the 7 kilometers (over four miles) of future streets, which carried all materials to the spot where they were to be used.

\* Five million francs. In addition, 3,700,000 francs were advanced by the Ministry of Liberated Regions against war damage claims which the society had purchased.

† The highest peak of building costs in France was reached in July, 1920. They have now fallen to two and a half times what they were in 1914.

‡ Cesspools are still in use in many French cities, which use their sewers only to carry off waste water. Progressive cities are installing *tout-à-l'égout* (everything-to-the-sewer) systems and abolishing the cesspools.

"The actual construction of the 600 houses was finished in less than a year.

"Only 30 of the 45 hectares have been developed, the rest being held in reserve for future growth and meanwhile used for football. Five hundred square meters are allowed per dwelling, of which 45 to 50 are covered by the house, 300 are reserved for the garden, and the rest for streets and open places. (This is equivalent to eight dwellings to the acre.)

"Standardization of building materials did not prevent their combination in various ways to obtain a dozen different types of dwelling. The great majority contain four rooms (living room and three bedrooms), about  $3\frac{1}{2}$  meters by 4, besides a laundry, water-closet and small cellar, and in the garden a little house with wire run for chickens and rabbits. The gardens are fenced with cement rails, inside which privet hedges will be set out. Ivy, clematis, Virginia creeper, or climbing roses have already been started up the cottage walls. The wider streets have been planted with trees, and strips of lawn three meters wide separate the sidewalks from the gardens.

"A few cottages contain only three rooms, while others contain five, these being reserved for families with eight or more children.

"Fifty cottages contain a work-room with electric power, permitting such home industries as turning, weaving, or hosiery-making.

"Twelve shops have been built for the convenience of tenants, where they can purchase meats, groceries,

dry-goods, etc. A model steam bakery produces enough bread for the 3500 inhabitants.

"A large building has been erected for an infant welfare station (*Goutte de lait*), day nursery (*crèche*), and a trade school for young girls. These agencies have been planned along the most modern lines and will be of great service. The building will also contain two special dormitories where young children up to six or seven years old can be cared for for a fortnight when their mothers are confined.

"Work has been started on a big community house, which will contain a library, a dispensary, an entertainment hall for 600 people, club rooms, a gymnasium and 50 shower baths.

"A Catholic church will be built soon by special subscriptions. A provisional board chapel serves in the meantime. A site has been reserved for a Protestant church in case there should be enough Protestant tenants to warrant its erection. (About one per cent of the population of Rheims are Protestants.)

"Plans are being worked out for an open-air school for 1200 children. There will be twenty-five classes including kindergarten (*école maternelle*). The cost of the school buildings will be about four million francs.

"The complete cost of the *cité* (including the price of the land, the planting of fruit trees and shade trees, vines, etc., the construction of seven kilometers of roads, and the installation of sewers, water and electricity) amounts to 30 million francs, all paid for at the present time.

"Rents average 60 francs a month, with a reduction of five francs for each child under 16 beyond the fourth. That is to say, a family with ten young children would pay only 25 francs a month rent. These rents are calculated to cover the annual charges (including interest and sinking fund) and up-keep of the *cité*, including care of streets and lawns.

"It has not been possible so far to start building on the Boulevard Charles-Arnould on account of uncertainties connected with the city plan. The society hopes to begin work there in the spring of 1923.

"The society has still to procure through the gifts of generously disposed persons the money necessary to run the social services. Not less than 200,000 francs a year will be required at Chemin Vert, and 150,000 for the projected *cité-jardin* on the Boulevard Charles-Arnould."

#### Housing by Employers—The Railroad Company of the North

The most notable employer's housing enterprise in France and one of the most extensive in the world is that of the *Compagnie du Chemin de fer du Nord*. Their lines run largely through the devastated regions, by such war-wrecked cities as Arras, Amiens, Cambrai, Laon, Lens, Lille, St. Quentin and Valenciennes. Of their 3840 kilometers of tracks, 2340 had been occupied and 2160 destroyed by the enemy. There were 8 large viaducts, 811 bridges and 5 large tunnels to rebuild, besides 388 railroad stations, 115 systems of water supply and numerous repair shops,—a property

loss altogether of more than 1,300,000,000 francs, without counting machinery and rolling stock. That all the lines of this company were running again in April, 1919, constitutes an extraordinary feat.

The Company could not repair or operate their roads without putting up at least temporary shelters for their men. They decided promptly on a comprehensive housing scheme which would permit at the earliest possible moment the resumption of normal family life under conditions favorable to health and happiness. Many of these families had been separated and virtually without communication for four years, the men serving with the colors, the women and children suffering the hard lot of the civil population in the occupied territory. The health of all too many was broken by privation. The children had forgotten how to play.

By the end of 1921, the Company had erected cottages, in gardens, for 12,000 employees and their families—60,000 people. Most of the houses contain four rooms (living-room and three bedrooms) with toilet, porch, and a small cellar. One house in twenty has five rooms and another six for large and extra large families.

These houses are in 32 *cités-jardins* containing from 50 to 1300 dwellings and in 80 smaller groups. The first 1000 were ready-cut bungalows distributed along the length of the road-bed to serve as many needs as possible. Several thousand more are also of wood, but all the later ones are of fire-resistant material, mostly cinder-and-concrete blocks. Variety in color



FOUR 4-ROOM COTTAGES AT TERGNIER, BUILT BY THE CHEMIN DE FER DU NORD.



was sought from the first, and as soon as building in concrete began, variety in design was added. The psychological need for *cheerfulness* in color for these refugee families after four years of war was fully realized. As at Rheims, the wooden shutters, doors and window-casings are chosen to furnish the high notes.

The Company did not confine themselves to building dwellings. In many cases they constructed complete communities with schools, parks, playgrounds, club-houses, dispensaries, moving picture halls, shops and bakeries. Still more often, they have installed public baths and a general water supply. In the eight settlements which have over 200 houses, they have built complete sewer systems with septic tanks and filters.

This enormous piece of work was carried out by the regular engineering department of the road, without time for much study or consultation. Fortunately the chief engineer, Mr. Dautry, is a man of heart and of social insight, who has planned wisely and well and has succeeded in inspiring his staff with almost apostolic enthusiasm.

Tergnier is the largest community the Railroad has built. It contains 1326 dwellings, of which 406 are of wood and 920 of concrete. This is strictly a railroad town, with railroad repair shops, inhabited only by railroad employees. As it had been completely destroyed, its building was in a way easier than where old and new had to be patched together.

I shall not soon forget the impression of my day at Tergnier. It was Thursday—the holiday of French

school children. The babies were being taken by their mothers to the weekly *consultation des nourrissons* to be weighed and looked over by the Company doctor, the older boys were playing football, the older girls were attending cooking and sewing classes at the Domestic Science School (*École ménagère*), the little children were joyously balancing on the see-saws in their playground, women volunteers were presiding over the giving out and return of books at the library. Some of the older people still had a haunted look in the back of their eyes, but the children were rosy and happy. The *Compagnie du Nord* had given them back their childhood.

The Company have built garden suburbs containing over 800 cottages at **Lille** (*Délivrance*) and at **Lens**, and over 700 each at **Arras** and **Bethune**.

Architectually, I think the Lens *cité-jardin* is the most interesting. The grouping of public buildings—schools, baby clinic, baths, cinema and club-house around the village green, is particularly good.

One of the many wise features of this railroad undertaking is the avoidance of paternalism by putting the local government of each community into the hands of the tenants. The Company is, indeed, represented in the local councils, but a large majority of the members are elected by the residents. It may be of interest to note that no *estaminet* (the nearest French equivalent of a saloon) is allowed on the Company's land. An interesting improvement is the substitution of comfortable *foyers* (something like Y. M. C. A. club-houses) for the old barrack-like

dormitories at the centers where train crews have to spend the night away from home.

### An Industrial Housing Loan Bank

A unique instance of private initiative is furnished by the *Caisse foncière de crédit pour l'amélioration du logement dans l'industrie*. In 1918, seeing the need of immediate large-scale construction of workingmen's houses, chiefly, though not exclusively, in the devastated regions, and despairing of getting prompt enough or extensive enough assistance from the government, a group of leaders in the great mining and metal industries subscribed 5 million francs (later increased to 20 million) to form a joint-stock company to furnish credits for housing operations to employers belonging to their industries. Funds were obtained by the issue of bonds (25 million francs in 1919 at 5½ per cent and 75 million during the two years following at 6 per cent). The loans are made, not directly to the employer, but to a housing society designated by him, whose payment of interest and repayment of principal he has to guarantee. Loans are made at 8 per cent, which after paying expenses, allows for a regular 5 per cent dividend on paid-up stock and something over. In fact, the whole thing is a business transaction with worthy motives.

To have furnished over 100 million francs during these years for the construction of workingmen's homes is no small achievement, and thousands of new brick cottages for the miners about Lens and Bethune owe their existence to this source.

With present-day construction costs and so high a rate of interest, obviously no workman could pay a rent high enough to cover the charges. So the employer must be prepared to carry the deficit as part of his operating expenses.

Little control could be exerted over standards by the creditor society. Some of the houses built were excellent, some fair, some wholly undesirable. And the rise in building costs was slowing up activities. So, in 1920, they founded another joint-stock company, called the *Comptoir générale du logement économique*, to raise standards by furnishing good house-plans, to reduce costs by standardization and by dealing in large quantities of materials, and where desired, to take charge of the actual work of construction.

### Operation of the Ribot Law

This brief study of housing by individual initiative in France closes fittingly with a summary of its most individualistic form of activity,—home ownership by the workingman, arrived at with the help of the Ribot Law of 1908 and its recent amendments.

The lending is done through approved non-commercial mortgage loan societies (*Sociétés de crédit immobilier*), of which there are 84 in France. Up to 1922, 75 million francs of the 200 million originally put at their disposal by the government had been borrowed by them and reloaned,—30 million of it during the year 1921. I am told that during 1922 this movement continued in full force.

## CHAPTER VI

### STATE ACTION IN FRANCE

#### Rapid Growth of the Public Housing Offices

Valuable as has been the work of philanthropists and employers in improving French housing conditions, and extensive as will always be the field for their activity, there can be little doubt that the *big* work of the future, which will not consist in blazing trails, but in leading the bulk of the people over them, —is going to be done by the Public Housing Offices (*Offices publics d'habitations à bon marché*).

The reader will recall that these were authorized by the law of 1912. Up to the beginning of the war, only five had been established, including those of Paris and Nantes. From 1914 to 1919 nothing was done. Yet at the close of 1920, 81 Public Housing Offices were functioning, and by March, 1922, 106.

The three whose activities I am going to describe are those of Lyons, Paris, and the Department of the Seine. The last technically includes Paris, but through an understanding between the two offices, its activities are limited to the suburban districts outside the city walls.

### Undertakings of the City of Lyons

In 1914 Lyons had just prepared for itself a city plan when the war came, and all such things were laid aside. After the Armistice, the plan was gotten out, revised and adopted. It will be many years before it is carried out in its entirety, for it looks well ahead in providing parks and thoroughfares for the future growth of the city, and very large sums will need to be expended in widening and straightening existing traffic streets.

One important project calls for the prolongation of the principal business thoroughfare, the *Rue de la République*, straight up a hill and through a tangle of crooked streets and dingy houses.

Three projects are marked for immediate execution,—the reconstruction of the Moncey district, the building of a small garden suburb for working people with large families on the heights of *La Croix Rousse*, and the creation of a large garden suburb, also for working people, to be called the *Quartier des États-Unis* (Quarter of the United States). This will be on level ground near the factories. The *Quartier Moncey*, close to the *Préfecture*, is an over-crowded district of narrow streets, unwholesome old houses, and small courts. Existing streets are to be widened, new thoroughfares cut, old rookeries torn down, and the interior of blocks opened up. It is believed that by a judicious use of excess condemnation and assessment of benefits, the project can be made very nearly to pay for itself, as the new lots to be created will be worth very much more than the old.

The two housing projects are being carried out by the Public Housing Office of the City of Lyons, which was founded in 1920.

The *Croix-Rousse* suburb, *Cité Philippe de Lasalle*, is to have 124 one-family cottages and 61 flats. It is built on a tract with an area, apart from streets, of 24,600 square meters. The city has donated the land and put in streets, sidewalks, water mains, etc. The national government gives one-third of the estimated cost of 5,050,000 francs as a subsidy and lends more than three-fourths of the remainder for 40 years at 2½ per cent.

At the time of my visit last summer, 24 cottages had been built and occupied, and a contract had just been awarded for 50 more, including some with six rooms. The ones I saw each had four rooms in two stories. They were built in groups of four, back to back to economize walls and create larger and more sightly units. Porches and entrances were at the four corners, hence widely separated from each other. Each house had a small laundry or scullery, a small cellar and a water-closet. All the families were raising vegetables and flowers in their gardens with great assiduity. With one exception (a blind war veteran with a young wife and baby), they all belonged to the *famille nombreuse* class, having from four to seven children under sixteen, besides a few older ones and a grandparent or so. They were genuine working-class tenants, including a road mender, a metal worker, an electrician, a boiler maker and a man employed in a rolling mill. The blind soldier makes brushes. He

is the only one who pays the full rent of 1092 francs a year. Everybody else gets rebates for his extra children. The family with seven children under 16 pay only 672 francs.

Work had not begun on the *Quartier des États-Unis* when I was in Lyons, but the preliminaries were well advanced. This *cité-jardin* will have a population of 10,000 or 11,000 when it is completed. It occupies a long rectangle of land and will have six longitudinal rows of small detached three- and four-story apartment houses. Two of these small units, and sometimes four of them, will be united by a common open-air staircase. There will be 137 separate pavilions. The apartments will have three, four and five rooms, besides a kitchenette, pantry, water-closet and balcony. Each apartment will also contain a shower bath. As any form of bath in a working-class dwelling is unusual on the continent, I expressed my pleased surprise to Mr. Chalumeau, the City Engineer, who was showing me the plans. He said that as water was being piped to the apartments anyhow, and waste water carried away, the additional expense of the shower was not more than 500 to 600 francs.

The *Quartier des États-Unis* will have abundance of trees, grass and open spaces, a football field, bowling alley, library, club rooms, schools, hotels for single men and for single women, a restaurant, a day nursery and a number of shops.

The outcome of this experiment in municipal housing will be watched with interest in the United States,—the more so on account of the name which the city

fathers of Lyons have done us the honor of bestowing on it.

### Public Housing Office of the City of Paris

It will be recalled that great activity followed the passage of the housing law of 1912, and that a special act of the following year permitted the city of Paris to raise 200 million francs by the issue of bonds to be spent in housing projects.

Land belonging to the city in ten different districts was reserved for building. Of eleven projects for which plans were approved, work had actually begun on six when the war came. Architects and workmen were alike mobilized, and from August 1914 until 1919 housing work was at a standstill.

As early as 1913, official steps had been taken to create a Public Housing Office for the city of Paris. Its objects, as fixed by decree of the Prefect of the Seine, January 28, 1914, include the construction of dwellings or of *cités-jardins*, and the improvement of existing structures, as well as management. In the future it will handle all sides of municipal housing activity.

It was "endowed," as the French expression goes, on its creation, with 500,000 francs, payable in ten annuities. In other words, it had an appropriation of about \$10,000 a year (at par) for its running expenses, which clearly is not excessive. It is an organization for work and not for show. Until 1922 it did not take time or money to print a report. The report of 1921 is typewritten.

This nine-page document describes (1) the completion and renting of two groups of apartment houses, which the Office purchased in an unfinished condition; (2) the beginning of a group of buildings in the Rue de L'Ourcq to contain 346 apartments; (3) the beginning of a group in the Rue de Fécamp to contain 628 apartments; (4) plans for an elaborate *cité-jardin* on the site of Bastions 37 and 38; and finally (5) a report on the management of the eleven groups, containing 1476 apartments, which had been built and turned over to it by the City of Paris. I have seldom met more concentrated reading.

When the city of Paris framed its 1913 program, it held a competition among architects, which resulted in the selecting of two type plans,—one of relatively high standard and the other simplified to the last point for the sake of low rents. Six groups were to be of the better (Z) type and five of the cheaper (B).

At the beginning of 1923, the City of Paris, as distinguished from the Public Housing Office, had 14 projects completed, containing 1612 apartments, and 9 under way, which will contain 2495 more.

I visited both types of apartment. The B-type house I saw was situated in a triangle between Rues Boyer and Juillet, near the Père La Chaise Cemetery. Its apartments are rented only to widows with children—very largely war widows. Each apartment has a kitchen and two small bedrooms with partitions which do not go all the way to the ceiling. The saving in construction cost cannot be large, but the theory is that heating and circulation of air are simplified. The

toilet is outside the apartment and shared with another family. The rent is 500 francs a year. The general feeling is that too much has been sacrificed in standard, and it is not likely that more of this type will be built.

The **Avenue Emile Zola** type of house, which won first prize in the competition, has excellent standards. There are two groups on opposite corners of an intersecting street. The lot first built on is much better shaped for the purpose than the other, being nearly square. Its courts appear very large and spacious, although 55 per cent of the surface is built on. The long narrow lot across the street, with only 45 per cent built on, seems cramped in comparison. The first group has 133 apartments, 6 of two rooms, 18 of three rooms, 55 of four rooms, 37 of five rooms, and 12 of six rooms. Rents range from 580 francs to 1300, but as there are rebates for large families, the maximum rents are seldom paid.

The second group has 189 apartments, 24 of two rooms, 91 of three rooms, 57 of four rooms, and 21 of five. Baths and laundry for both groups are in the basement of the second.

The cost of the two groups of houses comes to between 12 and 13 million francs. Rents, as on all municipal houses, are calculated to pay interest and repay principal of the loans in 75 years, to which is added 2 per cent for upkeep.

Besides managing these municipal houses when finished, it will be recalled that the Public Housing Office was to build for itself. Its first operation was to purchase and complete two unfinished groups which

had been started before the war, one by private builders at the *Impasse du Docteur* (100 apartments) and the other by a housing society on *Rue Damesne* (42 apartments).

The first piece of independent building undertaken by the Housing Office was the group on the *Rue de l'Ourcq*. The land (7223 square meters) was one of the parcels already belonging to the city. It lies along the *Canal de l'Oise* in the district of La Villette, the northeast corner of Paris. It is a region of bad housing, much tuberculosis and high death-rate.\*

The architectural effect is massive and simple, but with a touch of Gallic distinction. The foundations and first story are of rough yellowish stone taken from the demolished fortifications. The rest of the walls are of yellow brick, soberly trimmed with pale red brick. Over the round-arched entrances to stair-halls are touches—the merest touches—of other colors. There are two dignified entrances with iron gateways, from the *Rue de l'Ourcq* and the *Quai de l'Oise*, to the two large inter-communicating courtyards. Forty-five per cent of the site is built on.

A majority of the apartments (198 out of 346) are of four rooms. The next largest number (89) have three rooms, 52 have only two and 7 have five. Orientation has been worked out with unusual care, so that all apartments without exception, and nearly all rooms, receive direct sunlight. The halls are exceedingly light and have high white-tiled wainscoting

\* The death-rate is twice as high and the tuberculosis rate five times as high as in the *Étoile* quarter.

throughout. (This was also the case in the Avenue Emile Zola houses.) I mentioned that this was something of a luxury with us, and was told that it cost in Paris only five francs per square meter set in place.\*

My most serious criticism of all these Paris buildings is their height—which is commonly seven stories, with certain portions raised to eight to vary the skyline. Those of us who know the six-story New York walk-up tenement, realize how hard the last flights are on mothers and children, old people and invalids.

The Rue de l'Ourcq group was begun when prices were at their highest. The anticipated cost was nearly 16 million francs. Thanks to the fall in prices and to careful management, the total is coming out in the neighborhood of  $12\frac{1}{2}$  million. Even so, there will be a gross return from the rentals of only 2.57 per cent. This would create an impossible situation if it were not for the government subsidy of one-third the cost. The later buildings, with constantly falling costs, will do much better.

The groups at present under construction are on the Rue de Fécamp (in the southeast section, near the river), where there will be 628 apartments, finished toward the end of 1924, and on the Rue du Poteau, where 668 apartments will be completed at about the same date. In both cases, government subsidy, and a loan from the National Bank of Deposits form an essential part of the financing.

The Rue du Poteau group is first of the four which

\* Approximately equivalent, at that date, to 40 cents per square yard.

will make up the *cité-jardin* on the site of Bastions 37 and 38 of the dismantled fortifications. The development, when completed, will accommodate 2500 families. There will be schools, dispensaries, day nurseries, baths, laundries, community buildings, shops, etc. There will also be ample playgrounds for children and elders, including football fields and tennis courts. The buildings here are to be of six stories, with an occasional tower-like protuberance rising one story higher. The whole area to be occupied is 88,750 square meters (about 62 acres). The layout is very complete and very beautiful.

### Public Housing Office of the Department of the Seine

The Department of the Seine, if we exclude the city of Paris, is a ring surrounding the city about four and a half miles wide, entirely suburban in character, and logically, though not administratively, a part of the greater city.

The work of its Housing Office is particularly interesting because the lesser land values permit open building on garden-suburb lines. (The prices paid for land have ranged from five to twenty francs per square meter.) The soul of the organization from the start has been Mr. Henri Sellier, its director, who is also a member of the Departmental Council and Mayor of the town of Suresnes.\* It was he who

\* One of the divisions of the Housing Office is a Service of Social Studies and Publications, under the charge of Mr. Aug. Bruggeman at 32 Quai des Célestins, Paris, where a reference library may be consulted and much information obtained.

started the ball rolling in 1913 to get the Office established. The various formalities were not completed until July, 1914, and of course, as elsewhere, the war stopped progress. It did not, however, stop careful thought and planning, and in December, 1916, the Departmental Council of the Seine appropriated 10 million francs for the acquisition of sites. Nine parcels of land were purchased, totaling 2,115,000 square meters ( $528\frac{3}{4}$  acres), and distributed in all directions from Paris. If the southern half of the ring has less than half the number of sites (Plessis-Robinson, Malabry and Champigny) it has more than half the acreage.

In December, 1918, the end of the war having emphasized the housing shortage, an appropriation of 12 million francs was made for provisional houses. The five-acre site at **Bagnolet** was chosen, easily accessible to Paris, and 113 little three- and four-room concrete houses were erected on it, much too close together. Provisional houses are always unsatisfactory, even from the point of view of cost ( $3\frac{1}{2}$  million francs in this case). Meanwhile, the 1919 legislation had been passed, opening up the possibility of subsidy and low-interest loans, and it was wisely decided to use the balance of the appropriation on permanent projects.

Another departmental appropriation, this time of five million francs, was made in 1919 for the purchase and completion of unfinished apartment houses abandoned by private builders. Eighteen groups of buildings were taken over in this way, scattered through

as many suburban towns, which provided accommodations for 445 families at a cost substantially below that of new construction.

In 1920 certain impatient members of the Council secured special legislation authorizing direct departmental building.

The Department thereupon acquired four tracts of land and proceeded to erect garden suburbs on them. Arcueil-Aqueduc and Arcueil-Route-Nationale are to the south of Paris and fairly adjacent to a left-bank tramway. Nanterre is a badly-shaped and -placed little tract to the northwest of the city, and Dugny an attractive but inaccessible spot to the northeast. The estimated cost of 25 million francs was to be shared equally between the Department of the Seine and the national Ministry of Health and Public Welfare.

Nanterre, like Bagnolet (though not so much so) suffers from land over-crowding, having 92 cottages of three, four, and five rooms on a little over five acres. The design of the houses is simple and good. Fourteen contractors were employed, each of whom was allowed to use whatever building material he pleased. This was by way of experiment, but proved rather costly. All of these houses are let to families with numerous children, many of whom had been living previously in one-room tenements.

Dugny occupies some  $22\frac{1}{2}$  acres of land containing a small pond and many beautiful old trees. It also contains a long four-story building intended for a sanatorium, then used as a boarding school, and dur-

ing the war as barracks. This substantial, though unbeautiful structure has been divided up into 42 apartments. The need for housing accommodations is so great that they were rented at once in spite of the mile and a quarter to Le Bourget, terminus of the nearest tram line into Paris. The cottage part of Dugny, in the park, is very pretty. The architects, Messrs. Bassompierre and DeRutté, have made the most of the site and preserved the fine trees with the greatest care. They have also succeeded in disposing their streets of cottages so as to shut out the view of the big incongruous apartment-house.

Nearly all of the 200 cottages have either four or five rooms. Red brick is the material used on some streets, on others concrete blocks with stucco finish. The average cost per cottage was 25,000 francs, or with land and development added, 36,000.

The two Arcueils lie a couple of miles to the south of the city limits and about three-quarters of a mile from each other. Between them runs the trolley line to Paris. Both are well laid out, on high ground, and pleasing in architecture. One is on the Route Nationale, the main highroad to Orleans. The other takes its name from its proximity to the great aqueduct of Vannes, which supplies Paris with water.

Arcueil-Aqueduc is built on three levels, the highest of which is much the most extensive. It commands a fine view of Paris and much surrounding country. Schools, health center and community building are to be grouped around an open space on the middle terrace.

The only fault of the site is the entire lack of trees, which it will take considerable time to remedy.

I visited Arcueil-Aqueduc in June, 1922, when the tenants were moving into the first completed houses, and again in October when nearly all were finished, and noted with pleasure the good effect already obtained from grass, hedges and flowers. I noted too that the color combinations, which I had thought rather violent, were greatly toned down by even those few months of weathering. Which leads me to believe that the same result will follow at the other Arcueil.

Mr. Payet-Dortail, prize winner of the Paris contest, is the architect of Arcueil-Aqueduc, and Mr. Louis Feine of Arcueil-Route-Nationale. The former site contains about 25 acres and will have when completed 228 cottages. The latter, on about  $22\frac{1}{2}$  acres, will have 274 cottages.

I was told at Route Nationale that the first 50 houses rented contained 350 children. The youngsters positively swarmed.

These four developments, the direct creation of the Department of the Seine, have been turned over, as fast as completed to the Housing Office to manage, and the obviously undesirable duplication of effort will not continue hereafter.

Returning now to the work of the Departmental Housing Office, it will be recalled that nine parcels of land had been secured, the smallest and most accessible of which had been used for the provisional houses at Bagnolet.

Of the others, the largest and most beautiful is

**Plessis-Robinson**, with about 162 acres of hill and valley, a considerable portion of which is covered by a forest of magnificent century-old trees. These are to be preserved as far as possible. Indeed, the possibility is still being discussed of building only around the edges of the forest and preserving it intact as a park. From the brow of a hill, as one emerges from the woods, there is a wide panorama of rolling country with Paris in the distance, as beautiful as the celebrated view from the terrace at St. Germain.

It is not expected that Plessis-Robinson will be a working-class suburb in the strict sense; the distance from Paris and the absence of industrial employment nearer at hand rule that out. But there is a large class of small-salaried office and bank employees, school teachers and government clerks, whose shorter hours of work will make it possible for them to take the journey, especially from the Sorbonne quarter and other left-bank centers. What is called in France the "English week," i.e., the half holiday on Saturday, is coming into general use and makes suburban living more attractive. Schools, movies, community house, shops, baths, laundry, dispensary, etc., will be provided. Some 1200 cottages and a population of 5000 or more are looked for ultimately. The number first built will be 282.

**Malabry**, only a mile or so from Plessis-Robinson, and close to the village of Chatenay, has also a large and attractive site (about 137 acres) and is expected to cater to the same class of tenant. It will probably be the last of the sites to be developed.

**Champigny**, just beyond the Bois de Vincennes, with a choice of quick transit lines, would have been one of the earliest developments had it not been for the delay caused by expropriation, to which it was necessary to resort to get certain portions of the property.

Of the remaining five sites, the work on two, **Drancy** and **Les Lilas**, was virtually completed when I saw them last (October, 1922); two more, **Stains** and **Suresnes**, were well under way, and **Gennevilliers** about to start.

**Stains** and **Suresnes** have a peculiarity, which is to be shared by **Gennevilliers** and **Champigny**. Along with the usual cottages in pairs or groups, they are to have a certain number of apartment houses, three and four stories high at **Gennevilliers**, four and five at **Stains** and **Suresnes**. All sorts of reasons are given, as cost of land or speed of construction. My own private theory is that apartment houses are being built because a large proportion of Parisian tenants prefer living in them, and also—a little—because most Parisian architects prefer designing them.

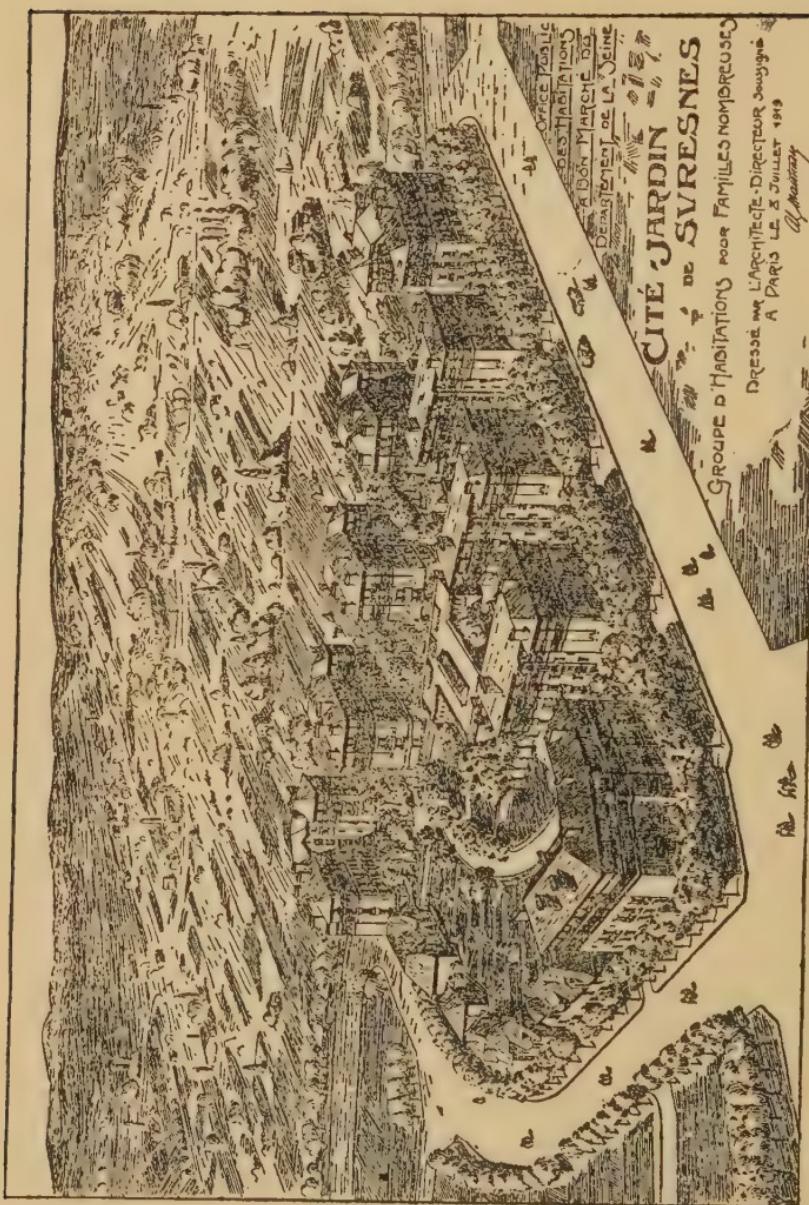
If apartment houses are to be built at all, the **Stains** and **Suresnes** type are admirable—two rooms deep, hung with balconies and window boxes, carefully oriented, full of air and sunshine, set among parks and playgrounds and athletic fields. I prophesy that they are going to be exceedingly popular.

Take **Stains**, which I visited twice, at an interval of several months. The trainway to St. Denis and Paris runs along one edge of the 65-acre tract. A

wide avenue lined with shade trees already traversed the property when it was acquired. Along it the multiple dwellings are going up, in yellow brick, of pleasing architecture. In the center is a good-sized open place called the Public Garden, around which will be grouped the community house, the post office, a cooperative restaurant, hotels for single men and for single women, a dispensary, a gymnasium, the moving picture house, and a number of shops. One of the side streets starting from the circle is also lined with apartment houses. All the rest of the *cité*, except the spaces reserved for sports, playgrounds, and gardens, is given over to cottages of the usual type. Schools are to be built just outside by the commune of Stains. The suburb will have, when completed, a population of 6800, of whom 4000 will be in apartment houses, 300 in hotels, and 2500 in cottages. Accommodation for 255 families, all in apartment houses, is provided in the present building program. Messrs. E. Gounat and G. Albenque are the architects.

Suresnes, with an area of about 75 acres, will have a population when completed of 6000. Its 1270 families will occupy 530 cottages and 740 apartments. The triangle which is being developed at the present time forms less than one-sixth of the whole. It contains 190 four- and five-room apartments and 13 cottages. Mr. Maistrasse is the architect.

Drancy is unique in that it was built at the request of the Belt Line Railroad (*Chemin de fer de la Ceinture*) and under a contract which distributes the burden in a very interesting way. The Housing Office



ONE SECTION OF THE CITÉ-JARDIN AT SURESNES BEING BUILT BY THE PUBLIC HOUSING OFFICE OF THE DEPARTMENT OF THE SEINE.

obtained the land and built the houses and manages them. For 25 years (or 50 at the option of the Railroad Company) it must give the preference in renting to the Railroad's employees. In return for this, the Railroad pays the annual deficit for 25 years (or, if it continues the arrangement, for 50 years). The deficit is calculated as follows: The Housing Office was to obtain a government subsidy for one-third the cost and a loan from the Bank of Deposits at  $2\frac{1}{2}$  per cent for most of the remainder, the rest at market rates (about  $7\frac{1}{2}$  per cent). Annual charges include management, repairs, insurance, taxes, interest on loans and installment of principal to complete repayment in 25 years. From this sum is to be deducted the rent received. The resulting deficit is what the Railroad pays. At the end of 25 (or 50) years, the houses are to be valued, and the Housing Office, which up to this time has paid nothing whatever towards its ownership of them, must pay the Railroad the value at that time in annual installments over a period of 25 years with 3 per cent interest on the unpaid balance. This sensible arrangement is advantageous to both sides.

Drancy, about a mile and a half from Le Bourget, in the opposite direction from Dugny, is accessible to the railroad and its repair shops, but not especially to anything else. It is a compact little piece of land of about  $12\frac{1}{2}$  acres. Lawns and shrubbery are already planted, and the tenants take full advantage of their allotted space for vegetables. Happening to be there one June day during the noon hour, I was impressed by the number of men working in their gardens.

Drancy has 152 dwellings, nearly all of which are four- and five-room two-story cottages. The rest are two-family flats. All the houses are either of dull red brick, or of khaki-colored stucco, or a combination of the two. The architects are the same as at Dugny.

**Les Lilas** seems to me the prettiest of all the garden suburbs so far, though Plessis-Robinson and Malabry, with their natural advantages, ought to beat it out in the end. The good effect of the layout is due solely to skillful planning, for the shape of its 16½ acres is as unpropitious as could be imagined, resembling that of a shoestring with a knot at each end, or perhaps it would be more accurately described as a spade with a badly bent shank. The handle is built around a circle filled with fine old trees. The long, narrow connecting shank is just wide enough for a street with a row of cottages on each side. But so cleverly are the houses placed that one has a sense of space and continuity throughout and no hint of the actual limitations of the site till one consults a map. Messrs. Pelletier and Teissère are the architects. The same color scheme—and a most harmonious one—is carried throughout,—red tile roofs, gray stucco walls and green shutters and doors. The round arched corner porches are charming. Privet hedges and climbing roses were planted before the tenants moved in. There are neat little masonry houses in each back-yard for chickens or rabbits.

Rents range from 800 to 1800 francs, but as there are rebates for extra children, and no one without a big family can have the larger houses, the maximum

COTTAGES FOR LARGE FAMILIES AT LES MILLES, DEPARTMENT OF THE SEINE.





rents never get paid. One family with eleven children were paying 1000 francs for a 1500-franc six-room house. Eighty-six dwellings were already occupied in October, 1922, and 126 were still to be completed.

Considerable use is made at Les Lilas, as at Dugny, Drancy, Arcueil and other French *cités-jardins*, of the variety in outline afforded by attaching one- and two-story cottages together in groups. Thus, two two-story cottages may share a high peaked gable between them and be flanked, on either side, by a one-story cottage, forming a sort of wing. This is the simplest effect. A great many others are obtainable.

What does the future hold for direct public action in France in respect to working-class housing? The friends of housing look back to the days before the war as to the Golden Age. They could have built and rented then indefinitely on an at-cost basis, without subsidy and without deficit. That good time will come again. Already building costs have fallen from an index number of 5 to about  $2\frac{1}{2}$ . It is not likely that pre-war costs will ever be reached, but the pre-war ratio between costs and wages should and doubtless will be. When that occurs, building on a large scale can begin. Meanwhile, with the moderate amount of work that can be done on a subsidy basis, invaluable experience is being gained by technical and administrative personnel.

The essential point is that the principle has been conceded and the machinery set in motion. Sooner or later, every French family will have a good modern home.

## CHAPTER VII

### HOUSING IN ITALY

#### Legislation before the War

National effort in Italy to improve the housing conditions of the working classes began later than in Great Britain, Belgium or France. The earliest national enactment was the Luzzatti law of 1903, so called from its distinguished sponsor, Luigi Luzzatti. It was amended and its scope enlarged in 1907 and again in 1908. It still forms the basis of Italian housing law.

Its purpose was to stimulate local efforts by supplying credits from government and other sources (chiefly from the National Bank of Deposits and Loans) up to 75 per cent of the cost of the proposed housing scheme, at rates of interest from  $3\frac{1}{2}$  to  $4\frac{1}{2}$  per cent, and for a maximum period of 50 years. In addition, approved working-class dwellings were to be tax-exempt for ten years after construction.

Communes were permitted to build if necessary, but every effort was made to encourage private initiative. Cooperative societies of prospective tenants or owners were aided, philanthropic societies also, and finally, the autonomous housing institutes (*Istituti* or *enti autonomi per le case popolari*), which were created and

endowed by city authorities, but managed by groups of private citizens.

The only element of subsidy in pre-war Italian housing legislation (except the negative subsidy involved in tax exemption) was a provision in the 1908 law for payment by the national treasury of one-sixth the interest on loans contracted by communes for housing projects. The direct activity of communes before the war had been on too small a scale to give this provision much importance, except as it established a precedent.

### Legislation after the War

As in the other countries we have studied, the war stopped building while it lasted and raised costs so that building could not be resumed at its close in spite of the accumulated shortage. The equilibrium which had been established in producing houses for working people with the help of loans at low interest was completely destroyed.

These facts were clearly brought out at a conference held in Rome immediately after the Armistice by representatives of autonomous institutes and cooperative housing societies. Legislation was accordingly secured in the spring of 1919 providing for a generous interest subsidy. The amount is a matter of arrangement in each case, but is calculated on the difference between a reasonable rent and the sum needed to cover running expenses, interest on the loan and installments of principal. In effect, the State pays the supercost due to the war.

Building costs in Italy rose to something over six

times those before the war. The cost of living was quadrupled. Wages were somewhat more than quadrupled. Salaries, as always, responded more slowly. They have been at most trebled, in some cases only doubled.

On the one hand, therefore, industrial workers, with more purchasing power than before, were demanding a higher standard of living. On the other hand, the small-salaried classes, harder up than ever, were being forced into smaller and poorer quarters, under pressure of the house shortage. As elsewhere, rents were held partially in check by restrictive legislation, but the scarcity of houses drove up prices in spite of it.

The government, as the employer of many thousand clerical workers in Rome, could not be indifferent to their plight. It must either increase their salaries to keep pace with the cost of living, or help them solve the housing problem directly. Very wisely it chose the latter alternative. Probably it has cost the government less than the increase of salaries would have done. Certainly it has done the employees and their families more good.

### Rebuilding the Devastated Regions

As in France and Belgium, the rebuilding of houses destroyed in the war is carried on under an entirely separate administration. So far, no official report on the subject has been printed. Great energy has been shown, and it is known that the major part of the work has been completed. In the province of Venetia, which suffered most heavily, I was informed some

months ago that 160,000 dwellings were destroyed and that 120,000 of them had been rebuilt. The fact that this great work was being carried on simultaneously makes the extent of the effort under the housing law the more remarkable.

### Results of the 1919 Housing Act

Government loans for the present housing program have been made from two sources:

(1) The National Credit Institute for Cooperation, in which the 1919 housing act established a division for building credits. This institution has already invested all of its available funds, about 130 million lire, in mortgage loans.

(2) The second source of credit has been even more important, for the Bank of Deposits and Loans (a state institution) loaned 550 million lire during the years 1920 and 1921, and altogether has loaned more than a billion lire for housing purposes, reaching what the official reports describe as a "state of saturation."

Various other organizations, such as savings banks, insurance institutes and charitable societies, have been authorized to make housing loans, and some of them, especially the savings banks, have done a good deal. But there are still vast accumulations of the people's savings which have hardly been tapped, which could be safely utilized for this purpose, to the great benefit of the people themselves. A bill prepared by the government with this object in view was before the Chamber of Deputies when I was in Rome (September, 1922) and confidently expected to pass. Subsequent

ministerial changes have altered the outlook. Premier Mussolini has shut down on all new subsidies.

The 1919 provision of interest subsidy was limited to houses built or begun during the five years ending December 31, 1925. Increase of tax exemption from ten to twenty years had the same limit.

The interest subsidy costs the government at the present time 73,100,000 lire a year (\$14,108,300 at par, or about \$3,600,000 at the present rate of exchange). This is the only positive outlay of the Italian government in connection with housing, but its negative contribution through tax exemption must also be borne in mind. As a result of these expenditures and loans, a housing program involving a capital outlay of two and a half billion lire has been brought about (\$482,000,000 at par, or about \$122,500,000 at current rates).

Of the 73,100,000 lire annual subsidy, 15,100,000 goes to housing projects for railway employees in all parts of the country; 6,000,000 are for use in the new provinces (formerly Austrian), and 52,000,000 are for the rest of the nation, about half of the amount being for the City of Rome.

Government statistics to May 31, 1922, supplied to the Chamber of Deputies, showed that a subsidy payment of 46,540,634 lire annually corresponded to a capital outlay totaling 1,704,363,279 lire and had resulted in the construction of 100,300 rooms.

The method of counting by rooms instead of by dwellings makes comparison difficult. It probably means from 25,000 to 30,000 families provided for.

If the subsidies for railroad employees, new provinces, etc., which were not included, carry the same proportion, the total housing effort since the war will have produced from 35,000 to 45,000 dwellings.

### Apartments versus Cottages

The proportion of apartments to single-family houses is much greater in Italy than in the other countries studied. In England the working people themselves strongly object to multiple dwellings and only accept them under the pressure of necessity. The English workingman wants his own front door and his own garden. Tall buildings have never been acclimated, even in London. The social economist, the sanitarian and the tenant are entirely at one. In Scotland, especially in Glasgow, customs are more like those on the Continent.

In France, Belgium and Holland, the social economists and sanitarians agree with their English colleagues as to the desirability of the cottage in the garden for health and for family life. Hence the great development of garden suburbs and villages,—*cités-jardins*.

In the great cities, however, especially in Paris, the building of large apartment houses for working people goes on, because of the price of land, because the tenants like apartments, because the architects prefer the "monumental," and because the general public associates big buildings with big cities and would consider anything else unseemly. The general attitude in Hol-

land is nearest to that of England, in France farthest, in Belgium intermediate.

In Italy, the point of view is still more remote. Not only do the working people in cities prefer living in big buildings, the architects prefer designing them, and the general public prefer looking at them, but the sociologists and sanitarians, the leaders of housing reform often make it a matter of patriotism and ethnic loyalty to adhere to what they call "the millennial traditions of the Latin race."

Even when they do move into suburban surroundings, they group several dwellings together, sometimes with great ingenuity, to give the effect of a single large villa. The difference between this and the English group of four or five adjacent cottages is esthetic and architectural rather than social. Gardens and entrances are separate, and there is every whit as much privacy in the Italian villa as in the English cottage.

Architecture changes even more with the climate than with race. On the shores of the Mediterranean flat roofs replace the steep slope of red tiles of the countries of winter snow. Belvideres are frequent, and suggest warm moonlight evenings. Walls are made thick because of long hot summers.

As to standard, the Italians build fine, substantial dignified structures, habitually and not inappropriately called *palazzi*, which, to be sure, does not connote as much as "palace" does with us, but is still a name calculated to add to the self-respect of those who live in one. The rooms are spacious, the ceilings high. Toilets, running water and electric lights are always

present. Baths are communal or absent (exceptions are noted). Balconies are frequent, closets rare. Floors are tiled. Charcoal is the favorite fuel, though in some places gas is extensively used for cooking. All coal in Italy is imported and therefore extremely expensive.

### The Agencies for Building

The non-commercial agencies which are producing working-class and lower middle-class dwellings in Italy are:

(1) Private Philanthropic Foundations.

(2) Communes, not, so far, an agency of prime importance.

(3) Autonomous Housing Institutes. The Commune founds them, with or without the help of charitable organizations and insurance companies. It endows them with a certain amount of capital. Sometimes private gifts are added, sometimes not.

One is tempted to say, why not either one thing or the other?—a completely public or a completely private agency? But I believe that, like the present Belgian system, these organizations *do* combine the advantages of public and private activity to a marked degree.

The City Council appoints a board of directors (usually including some of its own members), who serve without pay. People of distinction and ability will give their services in this way who could not be linked up with a city housing bureau. A great deal of red tape is cut out. Methods do not tend to be-

come bureaucratic. Economy and efficiency are both served.

(4) **Cooperative Housing Societies** are usually composed of prospective tenants, sometimes, however, of prospective owners. The tendency towards home ownership in the smaller towns seems to be growing. A Congress of Cooperative Housing Societies held in Rome in December, 1920, which resulted in a National Federation, showed this tendency very clearly. These societies are commonly along occupational lines. Their members are people of some initiative.

(5) The **Unione Edilizia Nazionale** (National Building Union) may be mentioned here as an important constructing agency not parallel to the others, but running crosswise, since it may be employed by any of them, instead of a private contractor, to carry out its work.

I know of no similar agency in any other country, and by all accounts it has had a large share, not only in the actual recent building program, but in keeping construction costs from mounting higher than they have. For after all, building costs in Italy increased only about as much as in Belgium and a little more than in France, whereas the rate of exchange, which by all analogy building costs should follow inversely, dropped much farther. To the measures of government control adopted, among which the competition of the National Building Union should be rated high, must be attributed Italy's comparative immunity from profiteering in building materials.

The Unione Edilizia was formed by the government

after the great earthquake of 1908 to aid in re-building Messina, Reggio, and the smaller towns and villages of the district affected. This was the work of a number of years, during which the Union developed a highly efficient and economical organization. Its overhead expenses are less than 4 per cent, and it not only purchases its building materials in large quantities, but manufactures bricks and tiles, quarries stone, and sets up saw-mills, where it is advantageous to do so.

Before the havoc wrought by the 1908 disaster was repaired, other, though fortunately lesser earthquakes occurred which kept the organization at work. So, after the war, it was natural to entrust it with the carrying out of the large building programs of the co-operative societies of State employees in Rome and Naples.

In the latter city, the Union is constructing apartment houses for cooperative societies which will cost about 50 million lire. In Rome the Union has erected 52 buildings in various parts of the city, covering an area of about 40,000 square meters, costing 200 million lire, containing 1500 apartments and about 10,000 rooms. (The average number of rooms in these apartments is seen to be very high.) The Union also appears as agent for the City of Rome and the *Istituto per le Case popolari* in building the garden suburb of Aniene.

### Milan

The industrial and commercial metropolis of North-

ern Italy is a busy, progressive modern city of over 660,000 inhabitants. It is a hot-bed of radical propaganda on the one hand and a stronghold of material prosperity on the other. It is also the cradle of the cooperative movement in Italy, which has attained extraordinary success there.

Its oldest and most important housing organizations are the *Società Umanitaria* (Humanitarian Society), which was started by a philanthropic gift of 10,000,000 lire known as the Loria Foundation, and the Autonomous Housing Institute established by the Commune in 1908 (*Ente Autonomo per Case Popolari*). Before the war it had a capital of 13,500,000 lire, of which 2,300,000 represented a gift from the Savings Bank of Milan, which has always been a powerful agency for social betterment. It has erected buildings in various parts of the city, containing 3000 apartments, mostly of two or three rooms. The type of building by the *Umanitaria* is similar. Both organizations furnish public baths, laundries, day nurseries and other social services.

I visited groups of houses belonging to both on the Via Porpora, in a new quarter of the city near the station, and found them good-looking, substantial four-story buildings. The *Umanitaria* houses were especially attractive by reason of open galleries or loggias which joined them together, which the tenants had made into perfect bowers of potted plants and climbing vines.

The walls of all these houses are extremely thick, the ceilings extremely high, the rooms very large. The

tenants seemed to have a great deal of very bulky furniture, obviously heirlooms. Two and even three large beds, two massive dressers and a couple of huge wardrobes would be placed in one room without especial crowding. There is plenty of cubic air space per head, but the objection comes, of course, from lack of privacy. Good baths, both tub and shower, are in the basement of one building for the use of the whole group. A hot tub bath costs one lira, a warm shower thirty-five centimes, and a cold shower ten—the last not much used, the others chiefly on Saturdays and Sundays. The laundries are similarly concentrated. The clothes are dried in the Housing Institute laundry by a centrifugal force device at a cost of fifteen centimes per bagful. This group of buildings also contains a library, a trade school and a day nursery. The *Umanitaria* group has a Montessori School, a bowling alley and an assembly room with a stage, where the tenants give concerts and plays. A city elementary school adjoins. Across the street are little allotment gardens which may be rented from the city for four lire a year.

The rent for a two-room apartment which I visited belonging to the *Ente Autonomo* was 330 lire a year. Before the war it was 265. A four-room apartment in an *Umanitaria* building cost 550.

A few blocks distant, along the Via Lombardia, one comes to the Villagio Gran Sasso, built in 1920 by the Autonomous Housing Institute. It is a collection of brick and stucco bungalows, semi-detached, or in

groups of three, with from three to six rooms and a porch, set in flourishing gardens. Each one, by way of experiment, contains a bath-tub. The occupants are mostly old tenants having large families of children. This is one of the attempts to popularize cottage life in Italy, but is said to be only moderately successful. The people do not like to live in what they regard as doll-houses.

There are other experiments in small dwellings in the outskirts of Milan, notably those for postal and railroad employees. Perhaps the leaven will work in time.

The earliest and best known of Italian garden suburbs is **Milanino**, three and a half miles to the north, founded in 1910 by the Cooperative Union of Milan on a tract containing 325 acres. It is a purely residential suburb with detached and semi-detached dwellings in gardens, well-shaded streets and plenty of open spaces,—a pleasant-looking, rather sleepy little place, with shrubbery and belvederes, tennis courts, a fountain, a grassy parkway, a bronze bust of Luigi Buffoli, father of the Italian Cooperative movement, a couple of schools, and a cooperative store and restaurant. At first, the company retained ownership of all the land. Later, lots were sold to members, and since 1920 to all comers. In 1920, 150 villettes had been built. A few have been added since. Most of the residents belong to the middle or professional class. Development has been hampered by poor transportation facilities.

## Florence

In the spring of 1909 the City Council of Florence organized the Florentine Housing Institute (*Istituto Fiorentino per le Case Popolari*), with an endowment of 500,000 lire, of which 100,000 was to be paid at once and the rest in five annual installments. In 1915 another appropriation of equal amount was made. The president of the Institute is a prominent engineer and member of the City Council, Cavaliere Giuseppe Lenci.

Their buildings have all been big four-story apartment houses, substantially constructed, severely plain, with large well-lighted rooms. One group is in the Campo di Marte, beyond the walls, to the northeast of the city, another in the diagonally opposite quarter, at the Via Bronzino. Other blocks are in the Via Erbosa and Via Circondaria. Altogether there were 223 apartments, containing 713 rooms. The total cost was just under a million lire. The cost per room varied, according to date, from 1238 to 1581 lire. The population was a little over 1000. For the ten-year period 1909-1918 inclusive, the death-rate for the city was 22.40 and for these houses 9.32.

After the passage of the 1919 legislation, the Florentine Institute promptly secured a loan of 10,000,000 lire from a local savings bank (*Cassa Centrale di Risparmi e Depositi*) at 4½ per cent for a period of 35 years, at the same time arranging for a subsidy of 2 per cent from the National Government towards paying the interest, and for an equal amount from the City of Florence. This left the Institute with the principal to repay at the rate of 1¼ per cent a year,

$\frac{1}{2}$  per cent of interest, and the cost of management and upkeep, all of which will be covered by the rent.

It was intended to build in four localities a total of 2500 rooms, but rapidly rising building costs cut the program in two and made it necessary to borrow an additional 300,000 lire. Construction was limited to the Campo di Marte and Via Bronzino adjacent to the older blocks. Costs were held to 8319 lire per room on the former site and to 9000 on the latter. Most of the apartments have three or four rooms. A few have two, five, six and seven. There are 108 apartments with 528 rooms in the new building at the Campo di Marte, and 224 apartments with 752 rooms at Via Bronzino. The new buildings show quite an advance on the old in amenities. They ought to, for they rent at 300 lire a year per room, while the old are only 70. The new legal income limit of those entitled to rent apartments in *case popolari* is 12,000 lire, which would be \$2300 at par, but is less than \$600 at current rates of exchange.

The Campo di Marte apartments have an excellent class of tenant—such as postmen, clerks and skilled mechanics. The smaller apartments at Via Bronzino, which were to be ready for rental at the beginning of 1923, were intended for lower-paid workers.

The directors of the Florentine Institute, before undertaking their last building program, considered the alternative of building small cottages. They were theoretically convinced of the social and hygienic superiority of cottage life, but dropped the idea when they found it would cost one-third more.



A BLOCK OF WORKING-CLASS APARTMENT HOUSES, BUILT BY THE ISTITUTO PER IL CASE POPOLARI IN THE TRIONFALE QUARTER, ROME, 1921-22.



## Rome

Praiseworthy housing work is going on in many parts of Italy, but it is in Rome that the great building program is being carried out which will raise the standard of living for many thousand families. One may wander for days through the peripheral parts of the city without seeing all of the construction that is going on. All these new buildings appear from the street to be high-grade apartment houses. Yet practically all are for civil service employees or skilled workingmen and are being built with government loans and subsidy.

Rome has always received more help from government sources than the provincial cities. A special act in 1904 provided for the sale of government land in Rome to cooperative housing societies on advantageous terms, and made new apartments renting under 1200 lire a year (\$230.00) tax-exempt for ten years. It imposed a tax of one per cent, afterwards raised to three, on unused building sites within the city (advocates of taxing idle land, please take notice), and turned over half the proceeds to the Autonomous Housing Institute.

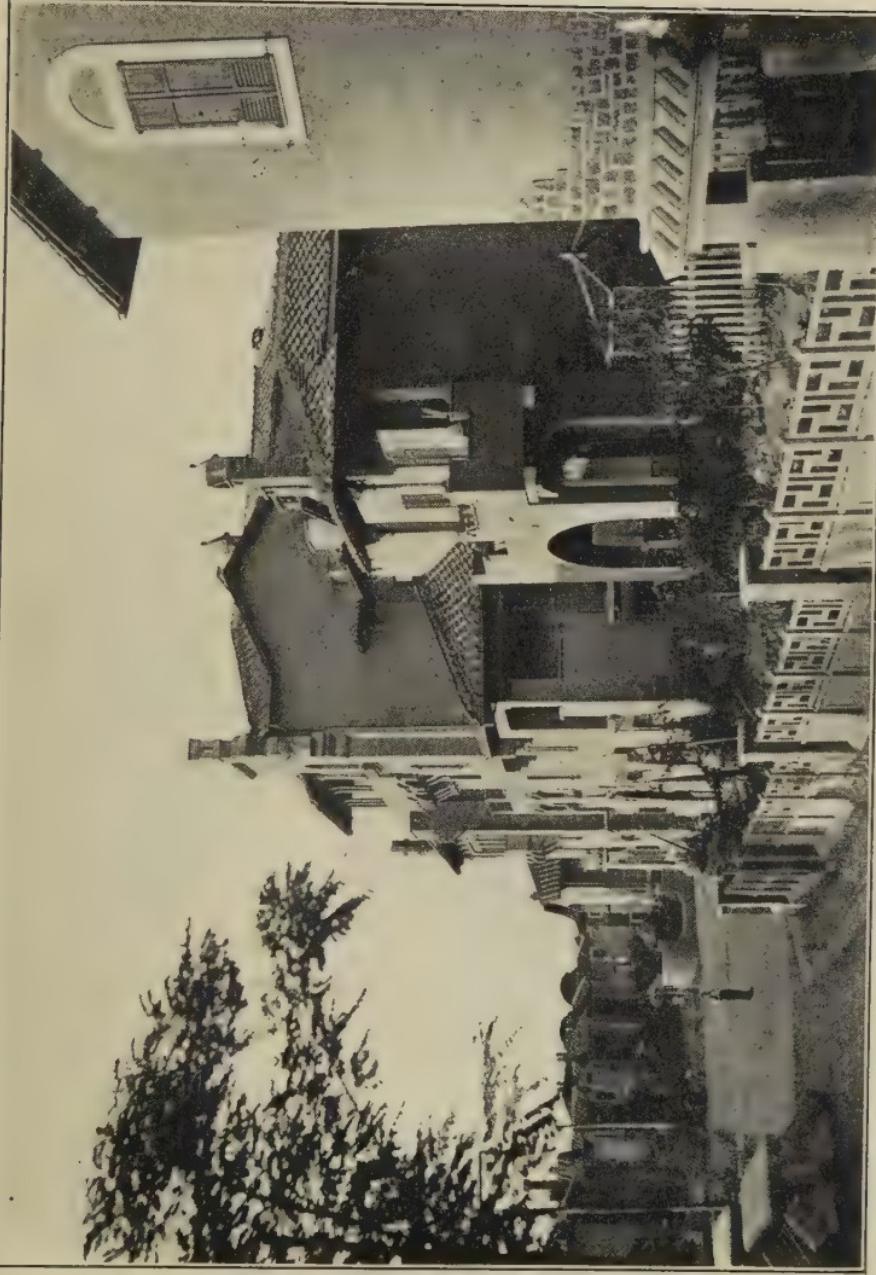
This organization (*Istituto per le Case Popolari in Roma*), which was founded by the City Council in 1904, had an endowment from the city of 3,000,000 lire payable in eleven annual installments, and gifts amounting to another million lire from various sources. It is the oldest and most important of the Italian housing institutes and has had great influence on the others. Its president is Comandatore Magaldi.

Previous to 1919, the Institute had invested a capital of 20 million lire in houses containing 4500 apartments (13,300 rooms) occupied by about 20,000 people. Post-war activities had resulted, to the close of 1922, in an investment of an additional 45 million, producing 1300 apartments (4500 rooms). The total population is now about 31,000. A further program for 855 dwellings, containing 3200 rooms, will result, by the end of 1924, in a total investment of about 117 million lire and a total population of about 36,000.

The Institute has tried out a number of types of dwelling and favors an approximation to garden city conditions wherever possible. Its largest apartment houses never have over four or five stories, but it has built a great many smaller houses of two and three stories, including those at the completed garden suburb of Garbatella and the unfinished garden suburb of Aniene. It was in one of the large apartment house groups of the Institute that Dr. Montessori's first school was established.

I visited an attractive four-story apartment house belonging to this organization, built since the war, on the Piazza d'Armi, not far from St. Angelo. It is built around a large court, containing trees, shrubs and grass, is covered with white stucco, and gets its color effect from the greenery just mentioned and from the flowers in the concrete window boxes, which, when I was there, were largely scarlet geraniums. Variations in the sky line must add to the cost, though undoubtedly they help in avoiding monotony. Each courtyard entrance serves four apartments on each

A GLIMPSE OF THE PRINCIPAL STREET AND A CORNER OF THE PIAZZA BENEDETTO BRIN AT GARBATELLA, ROME, GARDEN SUBURB BUILT BY THE ISTITUTO PER LE CASE POPOLARI.





floor. The stairs are all of white marble (a more plentiful commodity in Italy than with us), and the walls are white-tiled above the reach of children's fingers. The halls are excellently lighted.

Laundries are on the roof, which is flat and commands a view of the Vatican gardens. This must add to the interest of laundry work. High parapets hide clothes lines and tubs from below.

There is a genuine working-class population in this building, though doubtless of the better sort. A two-room apartment which I visited rented for 52 lire a month. Many apartments have three rooms, and a few are larger. As in many of the new Italian houses, the kitchen range and sink and utensils are in a sort of alcove off the living room, giving a slight effect of separation—more amenity, as the English say.

Outside the Porta San Paolo, not far from the historic site of St. Paul's martyrdom, the Institute has just completed a charming and thoroughly Italian little garden suburb, known as **Garbatella**. It contains only 190 dwellings (713 rooms) and a few shops, distributed in 44 separate buildings. The property, which consists of about ten acres, is on an elevation reached from the Via Ostiense by a broad ornamental stone stairway. The stairs lead to a large open place, the Piazza Benedetto Brin, around which have been grouped the only three- and four-story buildings in the settlement, whose presence lends architectural dignity to the civic center. Two-story buildings, containing three-fourths of all the dwellings, face on the streets. Some are divided vertically into two-story villettes,

others horizontally into flats. The Italians consider that there are advantages in both types. A great deal of ingenuity has been used to produce diversified effects.

Aniene, which lies a couple of miles to the north of Rome beyond the old Nomentano Bridge, will be a big place when it is finished. The estate comprises 700 hectares (1750 acres). Only 250 hectares are being developed at present. Two years ago this was all open country. Now there are paved streets and sidewalks, sewers, water, electricity, a new bridge, a trolley line to Rome, and about 750 dwellings built or building. Shops, schools and other public edifices are also under way.

The consortium already alluded to, of the City of Rome, *Unione Edilizia* and the Housing Institute, have received a loan from the Bank of Deposits of 30 million lire for the purchase of the estate and its development. This will be repaid through the sale of lots. In a few cases villas have been erected by private persons of considerable financial resources. But most of the dwellings are in villetta groups similar to the ones at Garbatella and Milanino, and are built by co-operative societies for their members. It is developing, I think, as a middle-class suburb rather than as one for working people. The omnipresent civil service employees will be largely in evidence.

The land is high and the view extensive. There is so far an entire absence of trees, but vegetation grows fast in Italy.

The largest of the cooperative housing societies in



A NEW APARTMENT HOUSE QUARTER BEING BUILT ON THE FLAMINIAN ROAD AND THE TIBER,  
ROME, 1921-23, BY COOPERATIVE SOCIETIES OF GOVERNMENT EMPLOYEES.



Rome is that of State Employees (*Istituto Cooperativo per le Case degli Impiegati dello Stato in Roma*) which was founded in 1908 by Luigi Luzzatti. It had received before the war two loans of 10,000,000 lire each from the Bank of Deposits, with which it had built 927 apartments containing 4800 rooms. It is now putting up structures which, when completed, will contain 1500 more apartments. Eventually all of the 6000 members will be housed.

The present buildings are in two groups, the smaller, containing 256 apartments, is on the Piazza d'Armi. The larger, consisting of eight big buildings around a lovely parklike garden, full of fine trees, is situated in the quarter known as Villa Lancellotti, beyond the Villa Borghese. Only half of the eight were under way when I was there, but these, containing 600 apartments, were nearly completed. They are dignified and handsome in external effect. The apartments will contain from two to ten rooms and will be distributed according to the real needs of families, which must move as they grow. There will be baths on each of the four floors. There will be a library, reading rooms containing all the papers and magazines, lecture rooms, day nursery, playrooms for older children, a gymnasium, football field, tennis courts, a technical school and vocational guidance. There will be a consulting medical service obtainable for a payment of 1.50 lire per month, and a medical visit at home can be had for two lire. The homogeneity of the tenants makes it easy to have social institutions of this sort run by a committee of themselves.

The amount of loan contracted for the Piazza d'Armi group is 19 million lire, and for the Villa Lancellotti (so far) 63 million.

Although the Housing Institute and the State Employees' Cooperative\* have worked on a larger scale than any other housing organization in Rome, there are no less than 118 other cooperative housing societies in that city which receive government aid in loans and interest subsidy, whose total operations bulk more than four times as large as the combined output of the two big organizations. Many of them also are composed of government employees, as those of a particular department, or postal and telegraph clerks. Some are skilled workers, as electricians, machinists, carpenters. Several associations are of disabled war veterans.

The work in Rome, so far as can be judged by published figures on subsidy and loans, forms about one-third of what is being done in the whole nation.

\* Credit is due to the architects, Ing. I. Costantini of the Housing Institute, and Ing. Quadrio Pirani of the Cooperative, for the high quality of their buildings.

## CHAPTER VIII

### HOUSING IN HOLLAND

#### **The Dutch Housing Program**

It was the good fortune of Holland that she escaped being drawn into the devastating vortex of the World War. It is the great merit of Holland that she took advantage of her peaceful state and unimpaired finances to inaugurate and carry on a great program of social reform and human conservation, which is going to be reflected for years to come in lower death-rates, healthier children and happier homes.

The Dutch are a practical people, not easily stampeded into hasty action, and not easily turned aside when they have once decided upon their course. Their housing program is not an emergency measure hastily adopted—not a flash-in-the-pan resulting from popular clamor and the post-war shortage. It is a deliberate policy worked out after years of thought, discussion, and careful experiment on not too large a scale.

#### **Legislation**

In 1901 Holland passed one of the most complete and compact all-around housing laws that any country has yet put on its statute books. It touches all sides of housing, constructive and restrictive.

On the restrictive side, it establishes minimum standards of light, cubic air space and sanitation. It provides for the closing of unfit houses and for the clearance of slum areas.

On the constructive side, it provides credit for building workingmen's homes to the extent of 100 per cent, on an at-cost basis. That is to say, the national government will lend the whole construction cost, for a period of fifty years, to municipalities wishing to build working-class dwellings or to approved housing societies guaranteed by their municipalities. The rate of interest is the actual rate at which the government can borrow money on the Amsterdam exchange at the date of the agreement. In this most important provision of the act, it will be seen that no subsidy is involved.

The principle of a possible subsidy under emergency circumstances was, however, recognized in the act, but not used until the war-time rise in construction costs made it necessary.

Communes may also lend money for housing purposes, but have not done so to any great extent.

There is still a third source of credit—Postal Savings Bank deposits, which have played a useful, though a limited part.

Town planning is obligatory in all communes with over 10,000 inhabitants, and the plan must be revised every ten years.

Administration is vested in an unpaid board of three with a paid secretary, which passes on all loans. There are provincial and local housing authorities, and the

slothful ones can be compelled to act by those higher up.

The broad principle of community responsibility for housing was recognized in the Act of 1901. But the Dutch had a strong objection to increasing governmental activities if there was any other way out, and did everything possible to encourage private initiative. The housing societies played a much more important rôle in the early years than the municipalities. But the logic of events has worked the other way. And though the societies are as active as ever—indeed more so—the city housing departments are nearly everywhere outstripping them. In Amsterdam, where the societies have reached their greatest development, they are still in the lead, but the housing department is catching up.

Dutch housing societies are, as elsewhere, of two sharply distinguished kinds—the philanthropic and the cooperative. The latter in Holland is always a tenants' society. Home ownership is not an issue. The little that has been done in that line has been with the aid of loans from the Postal Savings Bank. In the villages and among the farmers more than half the families own their homes, whereas in cities of over 100,000 inhabitants only  $6\frac{1}{2}$  per cent of the dwellings are owned by those who live in them.

It is generally conceded that there are too many small cooperative housing societies in Holland—about 1350. It would be better in many ways (and certainly easier for the city housing departments which have to supervise them), if the cooperators could be

induced to coalesce into a reasonable number of strong organizations. It is especially hard, for instance, for the municipalities to persuade small tenant societies to increase their own rents! (They do it, though.) Groups are formed along all sorts of lines, not simply occupational or local, but religious or political, or even because of comparatively minor bonds of agreement, such as vegetarianism or the single tax.

The dividends of these societies were formerly limited by law to 4 per cent, at present to 6 per cent. The object is to prevent any possible commercialization. As it is, there are practically no private funds invested. Owing to the government's lending the whole sum needed for building, the incorporators subscribe only the few dollars required as a minimum by the laws of association, on which profits or lack of profits could not be of any importance.

Work went along in Holland methodically, slowly gathering headway, until in 1912 and 1913 its volume had become considerable, and a pretty definite program of building and of slum clearance had been laid out. This continued during the first year of the war. But Holland, although a neutral, could not escape the increased cost of building or of living. By 1915 the work of private builders had nearly stopped. The societies redoubled their efforts, but by 1917 they also were brought to a standstill by the rising tide of prices.

Dutch building costs never went so high as in the belligerent countries with depreciated currency, nor so high as in Great Britain, where the demand was artificially stimulated, but towards the end of 1920 they

were three and a half times the 1914 figure. Slowly declining since that date, they are now about double what they were before the war.

Alarmed by the growing shortage of homes, the National Federation of Housing Societies called a conference at Amsterdam in 1918, where a program of action was agreed on with the governmental authorities. As a result, emergency legislation was secured providing for rent subsidies on new dwellings built by societies or by municipalities, to counterbalance increased building costs, and for a national housing census to determine the extent of the shortage.

The census, when completed, showed a shortage of 164,000 dwellings.

The payment of rent subsidy was at first borne equally by the municipality and the nation, but it was decided that this put too great a burden on the cities, and the local contribution was reduced to 25 per cent.

Payment of subsidy is based on the charging of a "fair rent," and a fair rent in Holland is officially held to be one-sixth or one-seventh of the family income. American social economists consider one-fifth as normal, and there is a growing opinion in Holland that under modern wage scales workingmen might reasonably be expected to pay a somewhat larger proportion of their earnings than one-sixth for the sake of a comfortable home. They are to be brought to it gradually, however, for were rents to be suddenly raised, many of them would overcrowd the old houses again and leave the new ones empty. The matter of wholesome homes for the nation's children is held to

be one of public policy, which the excessive thrift of ignorant parents cannot be permitted to block.

In order to relieve the shortage of middle-class dwellings, special legislation in 1919 provided for a flat subsidy to private builders under certain conditions. It also permitted them to borrow from the government at 6 per cent for fifteen years. At the time of highest prices the subsidy amounted to 2000 florins (\$800) per dwelling. It has now been cut down to 300 florins (\$120), which is too little to be an inducement. Middle-class building has, therefore, come to an end for the time being.

The housing program mapped out in 1918 contemplated: (1) the extinction of the accumulated shortage, (2) systematic slum clearance, with (3) the substitution of good dwellings for bad.

A valuable educational organization was formed at the time of the 1918 housing congress in Amsterdam. This is the Dutch National Housing Institute (*Nederlandsch Instituut voor Volkshuisvesting*), which publishes an excellent illustrated monthly (*Tijdschrift voor Volkshuisvesting*), whose mission is to keep Holland informed of housing progress at home and abroad.

To the kindness of Mr. D. Hudig, director of the Housing Institute, in permitting me to consult a still-unpublished report of his, I am indebted for much of the statistical information in this chapter.

### Results

From 1915 to 1921 inclusive, there were built in

Holland, with government assistance, 129,042 dwellings, and the number estimated for 1922 was 45,000,—or a total for eight years of 174,000 dwellings! Moreover, 107,000 of them have been built during the last three years.

When we remember that the population of Holland, according to the 1920 census, is less than seven millions (6,841,155), that building costs during that period varied from twice to three and a half times the pre-war figure, that no building of dwellings for working people or small-salaried persons was or could be undertaken on a commercial basis, we get some conception of the enterprise of the Dutch people and of their determination to see that the Dutch children of the future are born into something worthy the name of home.

In proportion to population, we should have to construct 1,600,000 dwellings, or 533,000 a year, to equal the Dutch record. Our yearly output of dwellings of all classes before the war, all of course on a commercial basis, was only 400,000.

The annual expense of the rent subsidy had become, in July, 1922, on 95,772 houses 8,392,925 florins (\$3,337,170). Up to that time 93,243,162 florins (\$37,297,265) had been paid out in lump subsidies to private builders on 46,970 dwellings. That expenditure is finished. The eight million florins are an annual charge for fifty years except in so far as rents are increased during that time, but in view of the government's firm policy to increase them as fast as public

opinion will permit, there is no doubt the sum will be greatly reduced and much of it totally extinguished before the expiration of the period. In addition to the subsidies, 668,214,555 florins (\$267,285,822) had been advanced as housing loans, but this large sum is, of course, being returned, principal and interest.

The Dutch government, as building prices dropped, has been cutting down on the use of subsidy. Mention has already been made of the virtual elimination of subsidies to private builders. In regard to municipalities and housing societies, an order was issued in November, 1922, that no new projects for dwellings would be approved which did not provide for a rental at least 90 per cent of the economic (i.e., expense-covering) figure.

This will slow down building in many places. In a few cities it may stop it for a while. In a few localities, however, even now, houses are being built which can be made to pay their own way.

It has been figured that at the beginning of 1923 the shortage of dwellings in Holland was still about 57,000. But with the momentum acquired in the last three years of building, the end of the shortage may surely be said to be in sight. It is expected that it will be wiped out by 1925, after which general slum clearance will be resumed.

I venture the prophecy that Holland is going to be the first country in the world (unless it be New Zealand) to have a 100 per cent properly housed population.

**Amsterdam**

From a recent publication of the excellent city housing department of Amsterdam, I take the following figures:

Population of Amsterdam on January 1, 1922 .....	689,195
Number of families in Amsterdam on July 1, 1922..	174,028
Number of dwellings in Amsterdam on July 1, 1922 (including insanitary ones) .....	155,282
Shortage of dwellings in Amsterdam on July 1, 1922.	18,746
Number of new dwellings required annually to keep pace with the increase of population .....	2,500

## Dwellings in course of construction on July 1, 1922:

By private builders .....	4,191
By the City Housing Department .....	1,238
By Housing Societies .....	2,448
 TOTAL .....	 7,877
Dwellings being planned on July 1, 1922 .....	8,000
 GRAND TOTAL .....	 15,877

That will leave a deficit of only 2869 dwellings, or if it takes a year to complete the planned houses, 2500 more, equaling 5369. In view of what Amsterdam has already done, can it be doubted that she will accomplish it?

Here is a summary of work during the past four years:

*Dwellings Completed in Amsterdam*

	1919	1920	1921	1922
	(Estimated)			
Dwellings constructed by private builders .....	132	317	835	3222
Dwellings constructed by City Housing Department:				
Permanent .....	667	123	461	730
Temporary .....	184	...	284	741
Dwellings constructed by Housing Societies .....	989	297	1598	2451
TOTAL .....	1972	737	3178	7144 *

Adding them together, we have 13,031\* dwellings in four years.

The so-called temporary dwellings put up by the city are a combination of brick and frame calculated to last 25 or 30 years instead of the 50 or more years of the permanent type.

*Dwellings erected in Amsterdam between 1909 and July 1, 1922*

By private builders .....	15,247
By Housing Societies:	
(a) With loans from the national government .....	8,000
(b) With loans from the Postal Savings Bank .....	870
(c) With loans from the city government .....	238
	—
	9,108

\*The figures in the July 1 report quoted above supersede those of the earlier 1922 estimates, whose totals must be increased, therefore, by 733.

## By City Housing Department:

(a) Huts (ready-cut frame bungalows).	408
(b) Temporary (brick and frame) .....	1,015
(c) Permanent .....	1,499
	—
	2,922
TOTAL .....	27,277

From 1909 to 1915, inclusive, the number of dwellings built just about kept pace with the annual increase of population. This was true in spite of 1909 and 1910 having been very lean years, for 1912 and 1913 showed great activity. The city housing department did not begin to build until 1917. In 1909 only 28 dwellings were built by societies. Everything that was done was done by private builders. In 1913 the output of the societies had increased to 991 dwellings. In 1915 it was only through their wonderful activity that the building average was maintained. In that year they erected 1638 dwellings, while the private builders put up only 634. This illustrates very well the wide margin that exists between building for profit and building to cover expenses. The continued rise of costs, however, finally caused the societies also to stop building until the government came to the rescue with subsidies.

In 1917 the city housing department began to take a hand in building to remedy the accumulating shortage. At first it put up cheap emergency cottages only. The difficulty in getting building materials partly accounted for this, but partly also it was the pressure of haste.

The Dutch prefer single-family houses where practicable, but the exaggerated cost of land on 40-foot piling makes it impossible to house the people of Amsterdam in this manner, except in a few out-lying districts. One of these lies to the north of the harbor, or Y, where a municipal ordinance forbids structures of more than two and a half stories. Here the housing department has erected an extensive garden suburb with one-and-a-half-story brick or brick-and-frame cottages, in long rows, according to the Dutch custom, with little flower gardens in front, and often a climbing rose over the door, but no vegetable gardens behind, because of the dearness of the land.

Most of these cottages have five rooms. The standard of housing for workingmen in Holland is as high as anywhere on the continent of Europe. It is lower than that obtaining in Great Britain, chiefly by the absence of the bath-tub. All have sewer-connected toilets, running water and electric lights. The roofs are of red tile, and the woodwork around doors and windows is painted in bright, cheerful colors. One notes in Holland a complete absence of shutters. This is an economy, for one thing. It would seem also to indicate a greater sense of security. And it carries with it a possibility of fresh air in the bedroom. Whether it goes farther than a possibility, is another matter, for the built-in cupboard bed with closed wooden doors is still the favorite sleeping place of an appreciable part of the population. Its abolition is a live issue in the way of hygiene, and one of the rules governing government loans and subsidies is that



TEMPORARY COTTAGES OF BRICK AND FRAME BUILT BY THE HOUSING DEPARTMENT OF THE CITY  
OF AMSTERDAM.



they cannot be had for houses containing cupboard beds.

In the municipal settlement across the Y are a community house with club-rooms, dispensary service, etc., and a public bath house centrally located.

Adjoining land has been developed by a number of housing societies, philanthropic and cooperative. Large districts are built up in two-and-a-half story two-family houses. This is a favorite Dutch type. The street floor contains a four-room apartment. An entirely separate entrance leads to the second floor. This also has four rooms, but the second-floor tenants have the attic in addition, which, besides storage space, contains one or two finished bedrooms. There are no cellars in Amsterdam and few in Holland. Water is too close to the surface.

It is necessary to travel rather extensively around the edges of Amsterdam to see the varied architecture of the housing societies in their groups of two-family flats and four-story apartment houses. One sees effective treatment of a quadrangle of high-gabled houses looking down on a formal garden. There is, indeed, no lack of good houses along conventional lines. But as Amsterdam is the center of the new modernist school of architecture which has attracted so much attention, interest naturally focuses on the work of this group.

The young insurgents against tradition who compose it owe much to Mr. Keppler, the architect at the head of the Amsterdam housing department, for their chance to show what they can do. Many of them

found their first opportunity for self-expression in designing blocks of apartment houses for cooperative societies. Some of them have been employed by private builders to design middle-class apartments. A whole extension at the south of the city, block after block, street after street, is being filled with them. This would seem to indicate that the new school has struck a genuinely popular chord. Speculative builders, as a class, are not strong on art for art's sake.

To the credit side of the modern school, it must be said that it has discovered (or re-discovered) the beauty of plain wall surfaces, that it masses its windows instead of sprinkling them, and that it treats the backs of houses and the interior of blocks as carefully as the street façades. It is a characteristic of the school (whether a merit or not, I don't pretend to say) that it revels in horizontal lines and flat roofs.

On the other hand, it sometimes seems to my unenlightened lay mind to be straining to make bricks and mortar do things for which they are essentially unfit,—to make them curve and billow and cascade,—even to “symbolize the rapid movement of modern life,”—as if it weren't bad enough to have to run after street cars all day oneself without going home at night to a house which appears to be doing the same thing!

In any group struggling for new forms of expression, since genius is scarce and talent unevenly distributed, many who aim at originality achieve only eccentricity.

“But it is the artist's business to externalize his

dreams," a distinguished exponent of the school said to me.

And the Puritan in me could not help replying: "If he is going to externalize them in dwellings of brick and mortar, which someone else has to pay for, and the taxpayers have to subsidize, and men, women and children have to live their lives in for the next hundred years,—then he has no moral right to indulge in nightmares."

### Hilversum

I am afraid I shall be suspected of being too elderly to appreciate modern Dutch architecture if I do not hasten to describe a place where I enjoyed it wholeheartedly.

Hilversum is a suburb of Amsterdam, eighteen miles distant, with about 40,000 inhabitants. In addition to its homes of prosperous Amsterdam business men, it has woolen mills, perfume distilleries, and some other industries, and consequently a considerable working population. For them the city has undertaken an extensive building program, which is being carried out by its Director of Public Works, Mr. W. M. Dudok, who is a well-known modernist architect.

Seven hundred story-and-a-half cottages have been built on a very irregular tract of land already owned by the city, surrounded and even penetrated by other buildings, making a difficult problem for the architect, which has been treated with much skill.

The settlement is grouped around four open places,

each with a distinctive character of its own, yet harmonizing with its neighbors. The principal one centers about a large school building with outspread protecting wings and a tall square clock tower which dominates—and keeps guard over—the whole community.

Two other open squares contain schools, one a sort of business high school, with a quiet blue and gray interior color scheme calculated to soothe the irritable nerves of adolescence, the other for little children,—wonderfully gay inside with the tulip colors the Dutch love so well—brilliant yellow walls, brilliant green paint on doors and window frames, with sash curtains of red and white checked gingham, and red geraniums growing in pots.

The fourth opening is a singularly peaceful little quadrangle behind the public library. Old people and childless couples are largely lodged there. Big families of romping children congregate elsewhere. The coloring is quiet and restful. The library and reading-room are over a large round archway leading into this sequestered spot. A straight opening between houses leads out at the other end. Looking from in front of the library through the circular arch, past the lozenge-shaped bed of dark green shrubbery in the center of the quadrangle, through the straight opening beyond, the eye rests on a pair of cottage doors on the opposite side of the transverse street, painted a vivid parrot green and surmounted by a long slope of red tile roof, behind which in the distance rises the old Hilversum church. The effect is startlingly decorative.

Near the tulip-colored school is a public bath house

MUNICIPAL COTTAGES AT HILVERSUM.





with flat roof and plain brick walls, which first gave me the cue for which I had half-consciously been groping. What was it these Dutch modernists reminded me of, with their horizontal lines and unbroken wall surfaces? Why, Egypt of course! They think it all comes out of their ultra-modern inner consciousness. But it doesn't. The brown-skinned architects of Karnak and Luxor dreamed the same dreams three thousand years ago.

Be that as it may, the cottages of Hilversum are not Egyptian, but Dutch, thoroughly and essentially Dutch, and that is one reason why I like them so much. They preserve the red tile roof of Holland and the traditional aspect of a Dutch cottage, than which no more peaceful, home-like, wholesome type exists. Why should a country blessed with red tile roofs want to trade them off for our flat ones?

Mr. Dudok apparently does not. But he varies his tile roofs astonishingly. Some have only a moderate pitch, others slope steeply, still others are bent to form mansards. They are built in rows, but the row is broken here by a pair of steep gables, there by a change in the setback.

Except for some experiments on the first few streets, the walls of all the dwellings are of plain red brick. The Hilversum brick is of a dull shade, almost grayish below the deep red of the roof tiles. But the doors and window casings afford the chance for brilliant and beautiful color effects. Deep green and bright orange are the favorite colors, set off by nar-

row lines of black. It is surprising how much character these black lines add.

The strangest thing is the way you can depend on Dutch housewives to hang just the right shade of curtain in the window and to plant just the right shade of flower in the tiny garden plot. Not one of them trains crimson ramblers around those orange and black window casings or plants purple petunias in the beds. They plant masses of flaming marigolds. And their little boys and girls wear knit scarfs and caps of the same vivid green that adorns their doors.

Wherever one goes in the Hilversum garden suburb, there are vistas interesting both in form and color,—a great deal of variety with complete essential unity of style and purpose. All this has been brought about by the use of very simple and inexpensive means. The varying angle of the roofs, the height and width of chimneys, the size and grouping of windows, the shape of the window panes, the treatment of front doors, the occasional use of a low brick wall on the boundary line,—these and a hundred other details have been employed to bring about the desired effects.

The final acid test of the merit of the Hilversum cottages is, to my mind, that the working people, for whose sake they were built, have never for a moment been subordinated to esthetic considerations, and expense accounts have been so carefully watched that, after completing the 700 dwellings planned, there remains a surplus which will permit continued building. The beauty of it is therefore a free gift. Not one house less has been built because of it.

## Rotterdam

The great seaport of Holland is a busy, modern, commercial city with over half a million inhabitants. Its housing department, under the directorship of Mr. A. Plate, is efficiently carrying out big projects for the benefit of the working population.

The following figures are from the department's last printed report. At the close of 1921 it had built 2654 working-class dwellings, 692 during that year. It had 2199 dwellings under construction, and plans were completed for 5733 more.

On December 31, 1921, the number of dwellings built by housing societies was 3377, of which 1177 had been built that year. The number under construction was 1219. At the time of my visit (November, 1922), I was impressed by the fact that while the societies were doing excellent work in quantity and quality, the city housing department was doing more.

Rotterdam has a very strong philanthropic housing society which has constructed a garden suburb with some three thousand red brick cottages at Vreewyk, which means Place of Peace. It lies to the south of the river Maas, the main part of the city being on the north bank.

I visited one of the largest type of cottage containing parlor, living room, kitchen and four bedrooms (one of them in the mansard). It was occupied by a family with seven children, and the rent was only five florins (two dollars) a week. I noted a generous supply of closets and cupboards.

Contrary to a popular impression which I used to

share, large families are not prevalent in Holland. The average number of children per family is less than three, and the number is decreasing. The average number of persons in a family in Holland was 4.81 in 1899, 4.75 in 1909 and 4.63 in 1920.

The streets of Vreewyk are straight, but the layout is not a gridiron. The cottages are in rows, but considerable care has been taken to avoid monotony, and open places, with shrubbery and trees, are frequent. Sometimes the houses are built directly on the sidewalk, and sometimes there is a setback with a bit of greenery. On east and west streets this is found on the north side of the street only. I had noticed the same thing in Amsterdam. It was pointed out to me (1) that flowers do not grow well on the shady side of the street, (2) that no garden at all looks better than a ragged one, and (3) that the amount of money saved, in view of the price of land, is really worth saving.

Not far from Vreewyk is a large suburb which is being built by the housing department and, to a small extent, by private builders. At the time of my visit the housing department had put up 1500 single-family cottages and two- and three-family flats, and the private builders 400. When the development is complete, it will have a population of about 15,000. Much of the housing department's work is in cream-colored concrete, whence it is known as The White City. There are many relieving dashes of color in the woodwork, and considerable use of the American style of flat roof.

The housing department has put up a number of

concrete block houses with double walls and air space, which it finds cheaper than brick, chiefly because they involve less skilled labor. It has also experimented considerably with poured concrete (Kossel system) and is inclined to think well of it, although the houses have not, it seems to me, been occupied long enough to settle conclusively the question of their dryness.

The department is working hard to reduce building costs to the point where it can do without subsidy and is near enough to its goal not to have its program halted by the 90 per cent order. It is also trying to keep rents up as near as possible to the economic level. A six-room flat which I visited rents for nine florins (\$3.60) a week.

The disadvantage of the suburbs to the south of the Maas is the time spent in getting to and from work. More accessible locations are much in demand, but involve such expensive sites that a more intensive style of architecture has to be adopted. The housing department is building a whole quarter of this sort at Polder Spangen.

Modernist architecture is not especially in evidence at Rotterdam, but one surprising design is being given a try-out by private builders in this same district of Spangen. Around a large quadrangle are erected a series of what I can only describe as superimposed two-story dwellings (four stories in all), with access to the upper tier from a concrete gallery of street width, supported on concrete posts, and reached by a large elevator.

A housing trip to Rotterdam would be incomplete

without a visit to Heyplaat, a garden suburb built shortly before the war for its employees by the Rotterdam Dry-dock Company. It contains about 400 brick dwellings, a square with a bronze fountain, a picturesque archway, with single rooms for bachelors over it, and a restaurant adjacent. There was also a kindergarten from which were emerging, when I was there, as plump and rosy a set of youngsters as one could wish to see. Heyplaat has been built long enough for trees and shrubbery to be well grown.

### The Hague

The capital of Holland is, like our Washington, simply a capital, with neither commerce nor manufactures. Its population, between 300,000 and 400,000, consists of wealthy people, poor people and government employees.

The city housing department, under the leadership of its chief, Mr. P. Bakker Schut, has been extraordinarily active and has shown great social insight. Its building program was inaugurated seven years ago (1915), and it has completed 6000 dwellings. Moreover, it is to continue building without interruption, for the houses which are being begun now will almost produce an economic rent from the start. And its policy of gradual but persistent increase of rents will extinguish most of the existing subsidies within the next few years.

Moreover, the housing department of The Hague is not waiting for some indefinite future date to begin slum clearance. It is clearing out slums as it goes

along,—oh, very slowly and patiently, of course. Money is too scarce and the shortage too great for anything else. But the gradual method has the very great advantage that the families concerned can get individual treatment and continued supervision.

Heart and head, kindness and firmness, are admirably blended in the way these uprootings and re-plantings are managed. No condemned house is torn down until its inmates are moved to something better. But they are not moved all at once from reeking slums to charming little garden suburb cottages. In the first place, moving at all is a reward of merit. The cleanest, most orderly family moves first. It is an honor to be chosen, a source of mortification to be passed over. A spirit of emulation is thus created. The first move is to another old house in a somewhat better neighborhood,—a passable old house which has running water, an indoor toilet, a roof that doesn't leak, and no vermin. In this probationary state, the family remains a longer or shorter time, according to its merits, before it follows the preceding family into one of the city's new houses. Even then it has not reached the city's best, which are reserved for a mentally and morally higher group.

I visited the old fishing village of Scheveningen, which is being demolished in the patient piecemeal manner just described. No one would suspect in walking along the streets lined with dingy shops and apartment houses that behind them lay a swarming ant hill of fisher folk, living in one- and two-room huts, getting their water from distant hydrants and throwing their

slops into open sewer gratings. The population is ignorant, alcoholic, quarrelsome, occasionally criminal, much intermarried, frequently feeble-minded—about as difficult material to work with as could well be imagined. With the feeble-minded, indeed, little can be done by change of environment. But where there is any mentality to work on, wonders are accomplished.

I was taken to see one of the "best" families in the old village—a family slated for speedy removal. The interior of the hut was fairly clean, though wretchedly poor and dilapidated. There was a closed cupboard bed built into the wall of the one downstairs room, where slept the father, mother and baby. A ladder led to the unceiled loft where the six older children slept on straw-filled tickings.

Then I visited a family with eleven children (several of them now married and gone) which had moved six years ago from just such a hovel into one of the big second-story-and-mansard apartments of the neighbouring garden suburb built by the city. It was a real home—bright, cheerful, adequately furnished, spotlessly clean, in perfect repair, with electric lights, running water, sanitary toilet, stationery wash-tubs, gas range, potted plants, and a busy self-respecting housewife presiding over her domain.

These are the human transformations that measure the value of housing work.

Rents are low in the old village—1.20 florins a week (48 cents) at the house I visited. Families have to pay considerably more when they move; but not too big a jump is possible at once. Each year the rent is



SLUM CLEARANCE AT THE HAGUE. AN ALLEY IN THE OLD FISHING VILLAGE OF SCHEVENIGEN, WHICH IS BEING DEMOLISHED AS FAST AS THE PEOPLE ARE MOVED TO BETTER HOMES.



increased half a florin, and the highest reached is six florins (\$2.40) a week.

There are 2500 cottages and flats in three garden suburbs in and about Scheveningen. Only about 300 of the condemned huts remain.

On the opposite side of The Hague, to the south, in the direction of Ryswyk, are three more garden suburbs erected by the city, containing altogether 3000 dwellings. The smallest of them, Laak, consists of 600 semi-permanent cottages erected during the war when materials were hard to get. They contain only what is essential for health, and are tenanted by unskilled workers, not of the highest type. Spoorwyk with 700 one-family cottages, with pretty community rose gardens and sand-pile playgrounds for the little children, has an intermediate class. Trekweg, with two- and three-family houses on a more expensive site, is the abode of the socially elect, a community of skilled workers of excellent character and habits.

If I have talked more about the management than the houses, it is not because the houses are not good, but because the management seemed to me superlatively so. Take, for instance, the simple and practical way in which management has been removed from the baneful influences of politics. Politics had become troublesome. Tenants with "pull" stopped paying their rent and got their political friends to back them up. It required a battle royal to evict anybody. These are just the things American opponents of municipal housing say would be sure to happen. Let them rejoice in their perspicacity. These things *did* happen.

Only, instead of abolishing municipal housing or surrendering to the politicians, a private limited-dividend society was formed, the Central Society for the Management of Houses, and to it the city dwellings, as fast as completed, are turned over for management. The same capable woman who was chief inspector under the housing department carries on the work under the Central Society, with the same group of men and women assistants. But the politicians have no more to say. Evictions are no trouble at all. So everyone pays his rent and nobody has to be evicted. Could anything be simpler?

The Hague is not the only city which employs women as housing inspectors, or which stresses the education of tenants. Amsterdam has an admirable corps of twelve women, trained in the Octavia Hill system of management, and working as a part of the municipal housing department. And other examples could be quoted.

## CHAPTER IX

### THE RIGHT TO A HOME

#### Housing as a Public Utility

At the end of the survey, one is more impressed by the similarities in the housing situation of the various countries of Western Europe than by the differences. The *right to a home* is everywhere conceded, not only by reformers, but by practical politicians. The providing of homes for the lower economic strata, whether of industrial or office workers, has been taken over as a *public utility*. The machinery for handling it as such is fully developed in England and in Holland, and is in process of development in France, Belgium and Italy.

Each of these countries proposes, within the lifetime of the present generation, to abolish slums and near-slums and to re-house its working population under conditions that make for health, efficiency and contentment. There will inevitably be periods of inaction and of reaction, but the working people themselves will see to it that such periods are transient. They intend to live in homes worth working for and, if need be, worth fighting for,—and the politicians know it.

There is very little opposition. The owner of slum property is not objecting much, because he knows he will receive compensation when it is expropriated. Perhaps he is hoping he may receive *over-compensation*. The speculative builder will continue to build for the only classes he has ever built for—those who can afford to pay him a profit. Architects and contractors, material men and building trade operatives are naturally in favor of a policy that means more activity in their line.

So long as abnormal building costs make subsidies necessary, the tax-payers will object at times. But the situation has greatly improved in this respect everywhere. In Great Britain and Holland, the need for subsidies is already almost at an end. As soon as new houses can be built and rented on an economic at-cost basis, wholesale construction will be carried on under government auspices in all these countries until the entire population is properly housed. The acquisition and demolition of slum property can in some cases be made to pay for itself, but more commonly it involves expense to the tax-payers. For this reason, future opposition is likely to center about slum clearance proposals.

### Municipal Housing and Central Control

Municipal housing is firmly established in Great Britain and Holland, the two countries which have advanced farthest in providing homes for their people. Societies will continue to be active, but more for middle class and skilled artisan groups than for the rank

and file. Work by Public Housing Offices in France corresponds to municipal housing in Great Britain and Holland and is well started. Whether the combination public-and-private agencies evolved in Belgium and Italy will be able, in the long run, to handle large-scale housing as efficiently as the entirely public agencies of the other three countries, remains to be seen. The degree and type of central control exerted in Belgium seems to me admirable, and I do not quite see how France and Italy will get on without something similar when their housing work expands. It must, however, be admitted that Holland has achieved her splendid results with a minimum of national machinery.

### Housing Standards

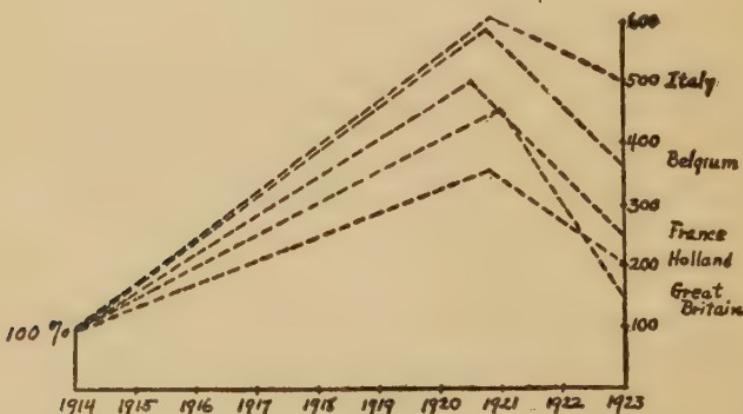
The housing standard is theoretically much the same throughout. In practice, it is highest in Great Britain, where the bathroom is a reality and not simply an ideal, and where the cottage in a garden is being built even in great cities.

In Italy and France, the large apartment house is still intrenched, and in Holland and Belgium the small one. The cottage in a garden is also being built extensively in Holland, Belgium and France, and is making its appearance in Italy.

An American would find heating arrangements everywhere inadequate, but so would he in the homes of the well-to-do. Undoubtedly we overheat our houses as much as Europeans underheat theirs, and which fault is more injurious to health is entirely open to argument.

### Building Costs

The diagram shows roughly the post-war movement of building costs in percentage terms of the costs of 1914, at the face value of the several currencies. There was a difference of six months between the earliest and latest dates at which the highest peak of prices was reached.



Expressed in terms of gold, present-day building costs in France, Belgium and Italy are surprisingly close to what they were before the war. As their currencies return to par, their building costs will doubtless approach those of Great Britain, Holland and the United States, falling in nominal amount and rising in gold equivalent.

### Number of Dwellings Built

Even in the absolute number of dwellings built, no definite comparison can be made for lack of comparable statistics.

Looking back over the foregoing pages, we may summarize as follows:

*Dwellings Built with Government Loans and Subsidies,  
1919-1922 (inclusive)*

Great Britain .....	240,000
Holland .....	107,000
Italy (estimated from number of rooms) .....	40,000
France (estimated on wholly inadequate data) ....	25,000
Belgium .....	17,839

Of course, as has been pointed out, the simultaneous work of rebuilding the devastated regions in the last three countries makes comparison unfair, in any sense of distributing merit.

*Number of Dwellings Built in Proportion to Population,  
1919-1922 (inclusive)*

	<i>Families</i>
Holland has built one dwelling for every .....	13
Great Britain has built one dwelling for every.....	34
Belgium has built one dwelling for every .....	84
Italy has built one dwelling for every.....	184
France has built one dwelling for every .....	320

The above table must be used with many reservations: It is fairly accurate for the first three countries. It is only an estimate for Italy and cannot be called more than a wild guess for France.\*

\* French statistics are not collected so as to show the total number of houses being built. Those constructed by the Public Offices of Paris and the Department of the Seine add up to 14,000. Work elsewhere by the Public Offices is on a small scale or still in project. The housing societies have not been able to resume large-scale building since the war. Considerable activity is shown under the Ribot Law. Such important developments as those of the Compagnie du Nord are excluded because in the devastated region.

It is perfectly obvious, however, that Holland has done very much more in proportion to her size than any other country, and that Belgium has done more than any other country which had war destruction to repair.

If we go back to 1915, Holland has, since that date, re-housed one family in *eight* ( $12\frac{1}{2}$  per cent) of her population with the aid of government loans and subsidies. It used to be said that re-housing one-tenth of the population would do away with slums. But the halt in commercial building aggravated the situation, and standards have risen, so that it is likely one-fifth will be nearer the necessary proportion.

### Relative Subsidy Costs

Too many divergencies have to be considered to make anything possible beyond a very rough comparison. There is no doubt that Holland has the most economical system. Her actual annual subsidy payment on not quite 96,000 dwellings was almost the same in 1922 as Italy's (reduced to a gold basis) for less than half as many. Taking Italy's payment at its face value, the difference, of course, would be much greater. Great Britain was paying some twelve times as much as Holland for about twice as many dwellings. Against that, it must be remembered that in Holland the local authorities contribute in addition one-third of what the national government gives, and on the earlier homes their contribution equaled that of the nation, whereas in Great Britain the penny-rate local contribution is comparatively small. It must also be

remembered that the housing standard in Great Britain is higher.

As between the subsidy systems of France, Belgium and Italy, I do not believe there is much to choose. Obviously, the three countries with depreciated currency have been forced to use larger subsidies in order to get building done than the countries with currency at par.

Turning from comparative subsidy cost per house to comparative cost per head of population, in order to measure the tax-payer's burden, it is similarly impossible to attain anything approaching scientific accuracy. In Holland in 1921, total national expenditures were in round numbers 700 million florins (\$280,000,000), or approximately 100 florins (\$40) for each man, woman and child in the country. Almost exactly one-tenth of this amount went for housing purposes, a record-breaking proportion. But seven-eighths of it went for flat subsidies to private builders (this being the year in which most of them were paid), and only  $8\frac{1}{3}$  million florins went for rent subsidy. This would mean 1.25 florins or 50 cents per head.

Without trying to consider proportions of a budget necessarily burdened with war debts, Great Britain's per capita expenditure for rent subsidy appears to be about twice as high as Holland's—almost an even dollar. Her expenditure on flat subsidies to private builders, which were at a rate one-third higher per house than Holland's, would have amounted to about \$1.20 per head if it had all been paid for in one year,

which was not the case. Even leaving out of account the disparity in local taxation, the housing burden carried nationally by the British tax-payer has never equaled half that of the maximum year in Holland. Of course, the war burdens of Great Britain were not present in Holland, the total per capita tax payment of the former country being more than double that of the latter. My point is that justifiable criticism of government expenditure for housing in England rests rather on the fact that the people were not getting as much as they should for their money than on the absolute amount of money involved. And the money's going no farther, it is only fair to remember, was not due to extravagance on the part of housing officials, but to the deliberate policy of the Ministry in not controlling the price of materials.

### Conclusion

The foregoing comparisons are important, for the more we study the experience of others, the easier it should be to shape our own course wisely,—if we ever get around to the point of having one.

After all, it is as true in America as elsewhere that the homes of the world are what the work of the world is done for—to build them and to keep them. Until they are all of a type that makes for health rather than disease, for decency rather than indecency, for happiness rather than misery, we shall have a world seething with rebellion.

Campaign orators, from force of habit, may continue to talk for some years about the "American

workingman's standard of living" as though it were something vastly superior, but our leadership in that respect has already passed from us. The working people of western Europe all have the eight-hour day. They have health insurance, unemployment insurance, old age pensions. Their money wages are still somewhat lower than ours, though not nearly so much so as they used to be; but in terms of purchasing power, there is not much difference, and the advantage is not always on our side. Most important of all, in a few years the working people of western Europe will be living, rank and file, in such homes as only the fortunate minority can attain under our hit-or-miss system. We have more automobiles, it is true. But which will profit a nation more in the long run—to have 100 per cent of its people living in good wholesome homes, or to have 50 per cent rushing up and down in Fords?



## APPENDIX



## APPENDIX

### The Spanish Housing Laws of 1911 and 1921

The title of this book lays upon me a certain obligation to speak of housing in Spain, while the fact that I have not been in that interesting country for a number of years, added to the lack of published statistics concerning the work that has been done there, makes me hesitate to formulate any general statements except concerning legislation, which one may legitimately study at a distance.

The Spanish Housing Law of 1911 was one of the few to introduce subsidies, in principle, previous to the World War. How much they were used, I am unable to say. It provided for local housing committees, somewhat on the Belgian model, for tax exemptions, free grants of land under certain conditions, a subsidy in the form of guaranteed interest on the obligations of non-commercial housing companies, and, occasionally, out-and-out gifts. The appropriation was limited to 500,000 pesetas (\$96,500) annually.

The Act of 10 December, 1921, goes much farther. It is a clearly thought out and clearly worded statute of some 25 pages, divided into seven chapters.

The first deals with the legal concept of the inexpensive dwelling (*casa barata*, exact equivalent of the French *habitation à bon marché*). Touching the

beneficiary, there is an income limit, varying with place of residence and number of dependents, 6000 pesetas, about \$1200 at par, being the Madrid maximum for a family of five. Touching the house, there is a maximum limit in its cost, where the beneficiary is building it for his own use, and a limit on the rent that may be charged, if it is to be rented. There are also sanitary requirements, the cubic air space per capita being unusually high. Much of this recalls the Belgian law, but there are differences. One interesting feature, not found elsewhere, I believe, is that beneficiaries are not permitted to pay rent higher than one-fifth of their income or to undertake the purchase of a home whose value, with land and improvements, is more than five times their annual income.

The second chapter deals with the means of encouraging the construction of inexpensive dwellings. This encouragement may take a number of forms:

(1) Nation, province or municipality may rent, sell or donate land.

(2) Qualified houses are wholly exempt from national, provincial and local taxes for periods varying from 10 to 30 years.

(3) A sum of 100 million pesetas (nearly \$20,000,000) is set aside for housing loans, at from 2 to 3 per cent interest, for periods of 30 years. The maximum amount that may be borrowed is 55 per cent of the cost of land and 70 per cent of the cost of buildings. Preference is given to cooperative societies of prospective home-owners and to employers building houses to rent to their employees.

(4) Rent guarantees are accorded under certain circumstances. It would seem more accurate to call them rent subsidies, since what occurs is that the government pays up to 50 per cent of the economic rent of certain approved houses to the societies which build them, in order to permit the rent charged by them to come within the means of the tenants. The method is entirely analogous to the British and Dutch rent subsidies. Three million pesetas are appropriated to this use.

(5) Somewhat similar in result is the provision, already found in the 1911 law, of interest subsidies on bonds which philanthropic and cooperative housing societies, as well as employers, are authorized to issue on mortgage security. This also amounts to 50 per cent of the interest, which must not exceed 6 per cent.

(6) Finally, there is a direct grant or subsidy up to 25 per cent of the value of land and buildings. But this, as I understand, is not a general policy, but an annual award to a few of the most meritorious, for which competitions are held.

The Spanish Housing Law is administered by the Institute of Social Reforms (*Instituto de Reformas Sociales*) under the Ministry of Labor, in cooperation with local housing committees, wherever the mayors have used their option of appointing them. It is not compulsory. The Institute has issued a number of useful pamphlets explaining the law and its workings, and its mission includes much work of an educational nature. It has just published a critical study of housing in England (*El Problema de la Vivienda en In-*

*glaterra, 1923)* by Mr. Federico Lopez Valencia of its staff.

### Portugal

Portuguese legislation and practice, in the matter of housing, are modeled on those of Spain.

### Housing Developments in Switzerland

The same apology is due my Swiss friends as my Spanish friends for this inadequate treatment of their work. I was unable to include Switzerland in my recent itinerary, my memories of earlier visits were out of date, and the Swiss do not publish general housing statistics. I am indebted to Dr. Karl Moser, Professor of Architecture in the University of Zurich, for much of the information in the following notes.

On the other hand, it is due my readers to state that, while the housing experience of both Spain and Switzerland would furnish material of interest to the student, neither has been, in any sense, a leader in the movement.

Switzerland resembles the United States in having a highly decentralized form of government. Indeed, its central authority is, as a rule, exerted even less than ours in local matters. Switzerland has no national housing laws. Some of the Cantons have housing legislation and some have not. Housing by societies, by employers and by municipalities can all be found in one place or another. German methods and German standards have predominated, though in Geneva and the other French Cantons such influence

is less marked, and French and Italian models are often followed.

In 1919 building costs had doubled, and the housing shortage had become so acute that the Swiss national government decided to assist construction by making loans at 4 per cent and by giving direct subsidies up to 20 per cent of total cost, on the condition that the Cantons should do the same. (This recalls the dollar for dollar method followed by our own federal government in appropriations for agricultural and other vocational education.) This action was taken, it appears, without legislation, by a sort of executive order or decree. In 1922, building costs having fallen to about 70 per cent advance on 1914, the subsidies were discontinued.

The Canton of Geneva was one of those which secured these government favors by matching them itself. In Geneva may be found (1) direct municipal housing; (2) housing by the *Fondation des logements économiques de Genève*, managed by a group of private persons, serving without remuneration, but created by the Cantonal Council of State, quite after the manner of the Italian autonomous institutes; and (3) housing by cooperative societies. The first two agencies build only multiple dwellings. Their houses are in the heart of the city, five and six stories high, built around a whole block with open space in the center. The cooperatives, on the other hand, put up cottages in the suburbs.

A garden suburb has been built since the war (1920) at Freidorf, outside of Basel, for the headquarters

employees of the Swiss Consumers' Cooperative Union. It contains 150 cottages of Puritanic severity, but not unpleasing ensemble effect.

A number of employers have provided houses for their work people. An interesting development, partly of earlier date (1911) is that of the Iron and Steel Works (formerly George Fischer) at Schaffhausen, of which Messrs. Curiel and Moser are the architects. Here the separate cottage in a garden has been rejected in favor of rows of dwellings around a quadrangle. The treatment of the façades is particularly interesting. The general type is German.

## BIBLIOGRAPHY

Works starred are easily accessible and will be found of special interest to the general reader.

### General

- U. S. BUREAU OF LABOR STATISTICS, Bulletin 158,\* *Government Aid to Home Owning and Housing of Working People in Foreign Countries*, 1914.  
WOOD, EDITH ELMER,\* *The Housing of the Unskilled Wage Earner*, 1919 (deals especially with housing in the United States, but gives a brief outline of housing work in other countries).

### Great Britain

#### BEFORE THE WORLD WAR

ALLAN, CHARLES E., *Housing of the Working Classes Acts 1890-1909* (text with explanations), 3d edition, 1911.

Bournville Village Trust, Report, 1910 (Pamphlet).

GEORGE, W. L., *Labor and Housing at Port Sunlight*.

HORSFALL, T. C., *The Example of Germany*.

HOWARD, EBENEZER, *Garden Cities of Tomorrow* (called *Tomorrow* in the 1st edition), 1898.

Land Enquiry Committee, Report, 1913-1914.

Liverpool Health Department, *Health of the City of Liverpool During 1912*.

Local Government Board, Annual reports.

London County Council, *Housing of the Working Classes, 1855-1912*.

National Housing and Town Planning Council, 1900-1910, *A Record of Ten Years' Work for Housing and Town Planning Reform* (Pamphlet).

NETTLEFOLD, J. S., *A Housing Policy*, 1905.

— *Practical Housing*, 1908.

— *Practical Town Planning*, 1914.

## BIBLIOGRAPHY

- Public Works Loan Board, Annual reports.  
 PURDOM, C. B., \* *The Garden City*, 1913.  
 THOMPSON, W., \* *A Housing Handbook*, 1903.  
 —— \* *Housing Up-to-date*, 1907.

## DURING AND AFTER THE WAR

- ACKERMAN, FREDERICK L., Series of articles on British War Housing in the *Journal of the American Institute of Architects*, 1917-18. Reprinted, with papers by other authors, under the title, *The Housing Problem in War and Peace*, 1918.  
 ADDISON, Rt. HON. CHRISTOPHER, M.D., \* *The Betrayal of the Slums*, 1922.  
 ALDRIDGE, HENRY W., *The Case for Town Planning*, 1915.  
 —— *The Administration of the Town Planning Duties of Local Authorities*, 1922.  
 Bournville Village Trust, *Experimental Houses*, 1920 (Pamphlet).  
 —— \* *Bournville Housing*, 1922 (Pamphlet).  
 —— "George Cadbury, Memorial Number," *Bournville Works Magazine*, December, 1922.  
 CLARKE, JOHN J., *The Housing Problem*, 1920. (Deals largely with housing before the War. Contains full text of Housing Act of 1919.)  
 COLE, G. D. H., *Guild Socialism*, 1920 (Pamphlet).  
 —— Series of articles on Building Guilds in the *Journal of the American Institute of Architects*, 1921.  
 A Former Housing Commissioner, *The Housing Question*, 1922.  
 \* *Garden Cities and Town Planning*, Files. See Sept., 1923, for a summary of the new Housing Act.  
 Guild of Builders (London), Ltd., *The Building Guild in London*, including first annual report, 1921 (Pamphlet).  
 HILL, OCTAVIA, and others, *House Property and its Management*, 1921.  
 \* *Housing Betterment*, Files, especially September, 1920, "How England is Meeting the Housing Shortage," Lawrence Veiller, and January, May and July, 1923.

- Local Government Board, Annual reports.  
— *Tudor Walters Report*, 1918.  
— *Manual on the Preparation of State Aided Housing Schemes*, 1919.  
London County Council, \* *Housing*, 1920.  
— *Housing Scheme, Review of Position*, 1921.  
Ministry of Health, \* Annual reports.  
— *Housing*, Files.  
— *Manual on Unfit Houses and Unhealthy Areas*, 1919.  
— *Powers and Duties of Local Authorities*, 1919.  
— *Type Plans and Elevations*, 1920.  
— *Unhealthy Areas Committee, Interim report*, 1920.  
— *Unhealthy Areas Committee, Final report*, 1921.  
Manchester Works' Committee, *The Building Guildsman*, Files.  
New Townsmen, *New Towns after the War*, 1918.  
PURDOM, C. E., and others, *Town Theory and Practice*, 1921.  
REISS, RICHARD, *The Home I Want*, 1919.  
Royal Commission on Housing in Scotland, Report, 1918.  
SELLEY, ERNEST,\* "An Inquiry into the Working of the Building Guilds" in *Garden Cities and Town Planning*, June, 1921.  
SPARKES, MALCOLM, *The Call of the Guild of Builders*, 1920 (Pamphlet).  
Town Planning Institute, Proceedings.  
*Town Planning Review*, Files.  
UNWIN, RAYMOND, *Nothing Gained by Overcrowding*, 1918 (Pamphlet).  
— *The Nation's New Homes, Pictures and Plans*, 1919, (Pamphlet).  
— \* *Town Planning in Practice*, 6th edition, 1919.  
Women's Housing Sub-Committee of the Ministry of Reconstruction Advisory Council, Report, 1919.

### Belgium

- Caisse Générale d'Epargne et de Retraite, Annual reports.  
— *Une Habitation à Bon Marché à l'Exposition Universelle et Internationale de Bruxelles en 1910.* (Small illustrated pamphlet.)

- Caisse Générale d'Epargne et de Retraite, Annual reports.
- *Album de Photographies et Plans d'Habitations à Bon Marché construites en Belgique.* (An elaborately illustrated folio gotten out for the International Exposition of 1910.)
- CULPIN, EWART G., "The Work of Rebuilding in Belgium" in *The Builder* (London), Nov. 11, Nov. 25 and Dec. 9, 1921.
- Goedkoopewoning van het Arrondissement Antwerpen, March, 1922. First annual report in French and Flemish.
- \* *L'Habitation à Bon Marché*, Files.
- *Album de Plans Types*, 1922.
- Société Nationale des Habitations et Logements à Bon Marché, *Loi instituant une Société Nationale*, etc., 11 Oct., 1919.
- *Notice Relative à la Constitution des Sociétés locales ou régionales de Construction et à leur Fonctionnement*, Jan., 1921.
- *Notice Succincte sur la Fonctionnement de la Société Nationale et des Sociétés Agrées*, July, 1921.

### France

- BÉNOIT-LÉVY, *La Cité-Jardin*.
- *Extême Urgence*.
- CERNESSON, JOSEPH,\* "Cheap Houses after the War," translated in *Housing Betterment*, Jan., 1923.
- Chemin de fer du Nord, *La Cité-Jardin de Tergnier* (Illustrated pamphlet).
- Conseil Supérieur des Habitations à Bon Marché,\* Annual reports.
- DAUTRY, Ing. en chef, *Les Cités Jardins du Chemin de fer du Nord*, 1922 (Pamphlet).
- Fondation Lebaudy, Annual reports.
- Fondation Rothschild, Annual reports.
- JAVARY, Ing. en chef de l'exploitation, *L'Effort du Réseau du Nord pendant et après la Guerre*, 1921 (Pamphlet).
- LEDERLIN, PAUL, *Les Œuvres Sociales de la Blanchisserie de Taon*, 1914.
- MANGINI, F., *Les Petits Logements dans les Grandes Villes*, Lyons, 1891.

*Le Musée Social*, Files.

*La Quinzaine Urbaine*, Files.

La Renaissance des Cités, various pamphlets, especially on city planning.

SELLIER, HENRI,\* *La Crise du Logement et l'Intervention publique en matière d'habitation populaire dans la région parisienne*, 4 vols. (Vol. I deals with bad housing conditions in Paris and vicinity, Vol. II, with housing work in other countries, Vol. III, with recent government housing in Paris and the Department of the Seine, Vol. IV gives the text of French housing laws and other official documents.)

— *Habitations à Bon Marché du Département de la Seine*, an album of 44 plates, with introduction and notes.

— “Notes on Fluctuation of Building Costs in France between 1914 and 1922” in *Garden Cities and Town Planning*, April, 1922.

Société Anonyme de Logements Economiques, Lyons, Annual reports.

Société Anonyme Démocratique des Habitations hygiéniques à Bon Marché, Lyons, Annual reports.

Société Française d'Habitations à Bon Marché, Publications.

*La Vie Urbaine*, Files.

### Italy

Camera dei Deputati,\* N. 1678, Session 21 June, 1922.  
(Ministerial report accompanying housing bill.)

Istituto Fiorentino per le Case Popolari, *Un Decennio di Vita*, 1919 (Pamphlet).

Istituto per le Case Popolari in Roma, *Borgata Giardino alla Garbatella*, 1923. (Illustrated pamphlet.)

Ministero dell'Industria e del Commercio, *Leggi e Decreti per le case popolari e per l'industria edilizia*, 1921  
(Housing laws and decrees).

Unione Cooperativa di Milano, Various pamphlets and folders on Milanino.

Unione Edilizia Nazionale. Report for the years 1917-1920. Rome, 1921.

**Holland**

Amsterdam Housing Department,\* *Some Figures with Reference to Housing in Amsterdam, 1922.* (Folder in English.)

Rotterdam Housing Department, *Verslag over de Werkzaamheden van den Gemeentelijken Woningdienst te Rotterdam over het jaar, 1921.*

STEIN, CLARENCE S.,\* "Amsterdam—Old and New, A comparison of the methods adopted by Amsterdam and New York City to meet the housing dilemma," in the *Journal of the American Institute of Architects*, Oct., 1922. Reprinted as pamphlet.

SWEYS, A. H., "Building Costs in Holland" in *Garden Cities and Town Planning*, May, 1922.

\* *Tijdschrift voor Volkshuisvesting*, Files.

**Spain**

Instituto de Reformas Sociales, Madrid, *Ley de 10 de Diciembre de 1921 relativa a Construcción de Casas Baratas y reglamento para su aplicación de 8 de Julio de 1922.* (Housing laws and regulations.)

— *¿Qué es una Casa Barata?* 1922 (Pamphlet).

— *Auxilios del Estado para la Construcción de Casas Baratas, 1922* (Pamphlet).

— *La Mision de los Ayuntamientos en el Problema de la Vivienda, 1923* (Pamphlet).

— *The New Spanish Housing Law, 1921.* (Brief account in English and French for the International Garden Cities and Town Planning Conference in London, March, 1922.)

WOOD, EDITH ELMER, "The Spanish Linear City" in the *Journal of the American Institute of Architects*, May, 1921.

**Switzerland**

*Arbeiter Kolonie Eisen u. Stahlwerke, vormal Georg Fischer, Schaffhausen, 1911* (Pamphlet).

*Siedelungs-Genossenschaft Freidorf, 1921* (Pamphlet).

VELGHE, O., "Les récentes constructions à bon marché de Genève" in *L'Habitation à Bon Marché*, Brussels, Jan., 1923.

## INDEX

---

- Acquisition of Land Act, 12  
Adams, Thomas, 25  
Addison, Dr. Christopher, 52,  
  53, 54  
Additional Powers Act, 12  
Albenque, G., 127  
Aldridge, Henry R., 40  
Alexandria (Scotland), 46  
America, 1, 4, 25, 29, 41, 46,  
  54, 73, 172, 181, 186  
Amiens, 94, 105  
Amsterdam, 2, 157, 158, 161,  
  162, 163, 172  
Amsterdam Conference in 1918,  
  157  
Anderlecht, experiment sta-  
  tion, 73, 84, 85  
Aniene, 141, 148, 150  
Antwerp, 77-80  
Arcueil-Aqueduc, 122, 123, 124,  
  131  
Arcueil-Route-Nationale, 122,  
  123, 124  
Arkle, Dr., 22  
Armentières, 93  
Arras, 105, 108  
Aubertin, J. M., 100  
Austria, 5, 136  
Autonomous Housing Insti-  
  tutes, 139, 142, 143, 147  
Avion, 94  
Avénue Émile Zola, 117  
Aynard, 98
- Bagolet, 121, 122, 124  
Baldwin, 56  
Bank of Old Age Pensions  
  (*Caisse nationale des re-  
  traites pour la vieillesse*), 91  
Barnett, Mrs., 22  
Barrow-in-Furness, 46  
Basel, 195  
Bastions 37 and 38, 116, 120  
Bassompierre, 123, 130  
Becontree, 62, 63, 64  
Belgium, 3, 5, 6, 8, 9, 65-88,  
  89, 91, 132, 134, 137, 138, 139,  
  140, 179, 181, 182, 183, 185,  
  191  
Bellingham, 61  
Belt Line Railroad, 127, 129,  
  130  
Bethune, 108, 109  
*Betrayal of the Slums, The*, 54  
Birmingham, 14, 15, 17, 18, 41,  
  43  
Bolshevism, 67  
Bonar Law, 56  
Borsbeek, 79  
Boston, North End, 3  
Boulevard Charles-Arnould,  
  102, 105  
Boulevard Pommery, 101  
Le Bourget, 123, 129  
Bournville, 13-21, 25, 61  
*Bournville Housing* (Pam-  
  phlet), 16, 21

- Bournville Tenants, Ltd., 19  
 Bournville Village Trust, 15, 16  
 Bournville Works Housing Society, Ltd., 20, 21  
 Brest, 94  
 Bruggeman, Aug., 120.  
 Brussels, 2, 73, 83-87  
 Buffoli, Luigi, 144  
 Building Costs, 7, 8, 47, 51, 54, 67, 70, 92, 102, 131, 133, 134, 140, 146, 156, 157, 159, 160, 180, 182, 195  
 Building Guilds, 33-38  
 Burns, John, 42  
 Cadbury, George, 14, 15, 16, 17, 25, 40  
*Caisse d'épargne et de prévoyance du Rhône*, 98  
*Caisse foncière de crédit pour l'amélioration du logement dans l'industrie*, 109, 110  
 Cambrai, 93, 105  
 Campo di Marte, 145, 146  
 Canal de l'Oise, 118  
*Cassa Centrale di Risparmio e Depositi*, 145  
 Castelnau, 62  
 Central Society for the Management of Houses, 178  
 Chalumeau, 114  
 Chamberlain, Neville, 56  
 Champigny, 121, 126  
 Chapman, H., 23  
 Charbonneaux, Georges, 99-105  
 Chelmsford, 59  
*Chemin Vert*, 99-105  
*Cité Philippe de Lasalle*, 113, 114  
*Chemin de fer de la Ceinture*, 127, 129, 130  
 Clyde Bank, 46  
 Cole, G. D. H., 33  
*Comités de Patronage*, 77, 88, 91, 191, 193  
*Commission supérieure d'aménagement, d'embellissement et d'extension des villes* 93, 94  
*Compagnie du Chemin de fer du Nord*, 105-109  
*Comptoir générale du logement économique*, 110  
*Comptoir Nationale des Matériaux*, 72  
*Council supérieur des habitations à bon marché*, 91  
 Cooperative Housing Societies (Belgian), 84-88  
 Cooperative Housing Societies (British). See Public Utility Societies  
 Cooperative Housing Societies (Dutch), 154-157, 161-165  
 Cooperative Housing Societies (French), 90, 97, 99  
 Cooperative Housing Societies (Italian), 132, 133, 140, 144, 150-153  
 Cooperative Housing Societies (Spanish and Swiss), 192, 195  
*La Corniche*, 99  
 Cornudet, Vicomte de, 93  
 Costantini, I., 152  
 Coventry, 46  
*Croix-Rousse*, 112, 113  
 Crombie, 47  
 Cross Acts, 10  
 Curiel, 196  
 Dagenham, 62  
 Daily Mail Model Village, 32  
 Dautry, 107  
 Death-rates, 17, 18, 29, 44, 61, 118, 145  
 Deauville, 102

- De Rutté, 123, 130  
 Devastated Regions, 8, 9, 65,  
   66, 99-109, 134, 135, 183, 184  
 Drancy, 126, 127, 129, 130, 131  
 Dry Dock Company, Rotterdam,  
   174  
 Dudok, W. M., 167-169  
 Dugny, 122, 123, 129, 130, 131  
 Dutch National Housing Institute,  
   158
- Eager, W. McG., 23  
 Earwick, 14  
 East Riggs, 47  
 Eggericx, Jean, 73, 85  
 Egypt, 55, 169  
 Elgood, F. M., 40  
 Employers' Housing, 22, 23,  
   82, 83, 105-110, 174, 192, 193,  
   194, 195, 196  
 England, 48, 49, 58, 137, 138,  
   179, 186  
 English week, 125  
*Ente Autonomo per Case  
 Popolari*, 142-144  
*Espérance du Foyer*, 99  
*États Unis, Quartier des*, 112,  
*l'Étoile, Quartier de*, 118  
 "Fair rent," 157  
*Familles nombreuses*, 89, 92,  
   97, 101, 103, 105, 113, 114,  
   117, 122, 124, 130, 131  
 Farnborough, 46  
 Feine, Louis, 124  
 First Garden City, Ltd., 16, 26,  
   27, 28, 29  
 Fischer, Georg, 196  
 Florence, 145-146  
 Florentine Housing Institute,  
   145, 146  
*Fondation des logements économiques de Genève*, 195  
 Ford, George B., 94
- Forrest, G. Topham, 64  
*Foyer Anderlectois*, 84  
*Foyer Laekenois*, 83, 84  
*Foyer Rémois*, 99-105  
 France, 3, 5, 6, 8, 9, 89-131,  
   132, 134, 137, 138, 140, 179,  
   181, 182, 183, 185, 191, 194,  
   195  
 Freidorf, 195
- Garbatella, 148, 149, 150  
 Garden Cities, 13, 24, 26, 27,  
   29, 30, 31, 61  
 Garden Cities and Town Planning Association, 23, 24  
 Garden City Movement, 23-33  
*Garden Cities of To-morrow*,  
   25  
 Genck-Winterslag, 82, 83  
 General Savings Bank (Belgian), 74, 75, 76, 77  
 Geneva, 194, 195  
 Gennevilliers, 126  
 Germany, 5, 73, 89, 194, 196  
 Gillet, 98  
 Glasgow, 137  
 Glengarnock, 47  
*Goedkoope Woning*, Antwerp,  
   77-80  
 Gounat, E., 127  
 Government Loans, 5, 6, 7, 10-  
   13, 18, 20, 21, 31, 32, 41, 57,  
   67, 68, 72, 74, 75-77, 80, 87,  
   88, 90, 91-93, 102, 110, 113,  
   129, 132, 135, 136, 145, 146,  
   150, 151, 152, 154, 158, 160,  
   183, 192, 195  
 Great Baddow, 58, 59  
 Great Britain, 1, 2, 3, 5, 10-64,  
   132, 156, 164, 180, 181, 182,  
   183, 184, 185, 186  
 Greenock, 47  
 Greenwich, 36

- Gretna Green, 47  
 Grove Park, 61  
 Guilds, Building, 33-38  
*Guillotière, Quartier*, 98
- L'Habitation à Bon Marché*, 72  
 The Hague, 174-178  
 Hampstead Garden Suburb, Ltd., 16  
 Hampstead Tenants, Ltd., 22  
 Harmsworth, Alfred (Lord Northcliffe), 26  
 Harmsworth, Cecil, 23  
 Herriot, Édouard, 99  
 Heyplaat, 174  
 Hill, Octavia, 178  
 Hilversum, 167-170  
 Hitchen, 28  
 Hobson, S. G., 33  
 Holland, 3, 5, 137, 153-178, 179, 180, 181, 182, 183, 184, 185, 186  
 Home ownership, 6, 11, 15, 20, 74-77, 88, 90, 91, 92, 99, 110, 140, 155, 192  
 Horsfall, T. C., 40, 42  
*House I Want (The)*, 46  
 Housing as a Public Utility, 179  
*Housing Handbook*, 39  
 Housing of the Working Classes and Town Planning Act, of 1909, 1919, 1921 and 1923, 11, 12, 32, 39, 41-43, 50-52, 55-57  
 Housing of the Working Classes Act of 1885 and 1890, 10, 11, 44, 60  
*Housing Question (The)*, 54, 62  
 Housing Shortage, 47, 49, 69, 121, 123, 133, 134, 153, 157, 158, 160, 161, 163, 175, 195
- Housing Societies (Belgian), 66, 68, 70, 71, 72, 73, 74, 77-88  
 Housing Societies (British). See Public Utility Societies  
 Housing Societies (Dutch), 154-157, 160, 161, 162, 163, 165, 171, 172  
 Housing Societies (French), 97-105  
 Housing Societies (Italian), 132, 133, 139, 140, 142-152  
 Housing Societies (Spanish), 181-193  
 Housing Societies (Swiss), 194, 195  
 Housing Standards, 14, 22, 43, 45, 46, 48, 49, 50, 57, 58, 64, 70, 72, 95, 110, 116, 117, 137-139, 164, 181, 187  
*Housing Up-to-Date*, 39  
 Howard, Ebenezer, 23, 24, 25, 27  
 Hudig, D., 158  
 Industrial and Provident Societies Acts, 11, 12, 35  
 Industrial Housing Loan Bank, 109, 110  
 Innegorden, 47  
*Instituto de Reformas Sociales*, 193  
 International Garden Cities and Town Planning Federation, 23, 24  
 Ireland, 5  
 Islem, 46  
*Istituto Cooperativo per le Case degli Impiegati dello Stato in Roma*, 151, 152  
*Istituto Fierentino per le Case Popolari*, 145, 146  
*Istituto per le Case Popolari in Roma*, 147, 148

- Italy, 5, 6, 8, 9, 132-152, 179, 181, 182, 183, 184, 185, 195  
 Joseph Rowntree Village Trust, 14  
 Kalfvaart, 66  
 Karnak, 169  
 Keppler, 165  
 Kossel system, 173  
 Laboring Classes Lodging Houses Act of 1851, 10, 43  
 Laeken, 83, 84  
 Laon, 105  
 Lebaudy Foundation, 94-97  
 Legislation (Belgium), 66, 71, 75, 88  
 Legislation (France), 90-94  
 Legislation (Great Britain), 10-13, 41-43, 50-52, 55-57  
 Legislation (Holland), 153-155, 157, 158  
 Legislation (Italy), 132-134, 135  
 Legislation (Spain), 191-194  
 Legislation (Switzerland), 194, 195  
 Lemineur, Emile, 77  
 Lenci, Cavaliere Giuseppe, 145  
 Lens, 105, 108, 109  
 Les Lilas, 126, 130, 131  
 Letchworth, 16, 23-33, 46, 61  
 Leverhulme, Lord (Sir Wm. Lever), 22, 40  
 Liège, 80, 81  
 Ligy, 66  
 Lille, 105, 108  
 Lincoln, 46  
 Liverpool, 22, 23, 41, 43, 44  
 Lloyd George, 52, 55  
 Local Government Board, 42, 45, 49, 50  
*Le Logis*, 84-87
- London, 2, 3, 33, 34, 36, 37, 41, 44, 60-64, 95, 137  
 London County Council, 43, 45, 60-64  
 Lopez Valencia, Federico, 194  
 Loria Foundation, 142  
 Luxor, 169  
 Luzzatti, Luigi, 132, 151  
 Lyons, 97-99, 111, 112-115  
 Maas, 171, 173  
 Magaldi, Comandatore, 147  
*Maison Liégeoise (La)*, 80, 81  
 Maistrasse, 127  
 Malabry, 121, 125, 130  
 Manchester, 33, 34, 37, 41  
 Mangini, Felix and Lucien, 97, 98  
 Messina, 141  
 Metropolitan Board of Works, 60  
 Metropolitan Borough Councils, 64  
 Metropolitan Police District, 64  
 Mid-Lanark, 47  
 Milan, 141-144  
 Milanino, 144, 150  
 Ministry of Health, 32, 50, 51, 53, 54, 59  
 Modernist Architecture (Dutch), 165-170, 173  
*Moncey, Quartier*, 112  
 Mond, Sir Alfred, 54  
 Montessori, 143, 148  
 Mortsel, 78  
 Moser, Dr. Karl, 194, 196  
 Municipal Housing, 10, 11, 12, 40, 41, 43-46, 52, 53, 58, 59, 60-64, 68, 111-131, 132, 133, 154, 155, 157, 161-165, 167-170, 171-173, 174-178, 180, 181, 194, 195  
 Mussolini, 136

## INDEX

- Nanterre, 122  
 Nantes, 111  
 Naples, 141  
 National Bank of Deposits  
   (*Caisse nationale des dépôts et consignations*), 91, 92, 102,  
   119, 129  
 National Bank of Deposits and  
   Loans (Italian), 132, 135,  
   150, 151  
 National Credit Institute for  
   Cooperation, 135  
 National Housing and Town  
   Planning Council, 39, 40, 43,  
   47, 55, 58  
 National Housing Reform  
   Council, 39, 41, 42  
*Nederlandsch Instituut voor  
   Volkshuisvesting*, 158  
 Neville, Mr. Justice, 25  
 New Industrial Towns, Amer-  
   ican Committee on, 30  
*New Towns after the War*, 31  
 New Town Agricultural Guild,  
   28  
 New York, 3, 94, 95  
 New Zealand, 160  
 Nomentano Bridge, 150  
 Norbury, 61  
 Northcliffe, Lord, 26  
 North End, Boston, 3  
 Number of Dwellings Built,  
   182-184  
  
*Offices publics d'habitations à  
   bon marché.* See Public  
   Housing Offices  
 Old-law tenements, New York,  
   3  
 Old Oak Estate, 61, 63  
 Olympia, 36  
 Orleans, 123  
  
 Paris, 2, 3, 92, 94-97, 111, 115-  
   120, 121, 122, 123, 124, 125,  
   126, 137  
 Payet-Dortail, 116, 117, 124  
 Peabody Foundation, 13  
 Pelletier, 130  
 Penty, A. J., 33  
 Père la Chaise Cemetery, 116  
 Philanthropic Foundations, 13-  
   18, 94-97, 139, 142, 143  
 Piazza Benedetto Brin, 149  
 Piazza d'Armi, 148, 151, 152  
 Pirani, Quadrio, 152  
 Plate, A., 171  
 Plessis-Robinson, 121, 125, 130  
 Polder Spangen, 173  
 Population, 48, 69, 159, 183,  
   184  
 Porta San Paolo, 149  
 Port Sunlight, 22, 23, 26, 61  
 Portugal, 194  
 Postal Savings' Bank Deposits,  
   154, 155  
 Private Initiative, 4, 13-38, 41,  
   68, 89-110, 132, 139, 140, 142-  
   144, 151, 152, 155-158, 161-  
   163, 165, 166, 171-174, 180,  
   181, 191-196  
*Problema de la Vivienda en  
   Inglaterra (El)*, 193  
 Public Health Acts, 10  
 Public Housing Offices (*Offices  
   publics d'habitations à bon  
   marché*), 92, 93, 111-131  
 Public Utility Societies, 11, 12,  
   16, 18-22, 51, 57, 58, 64  
 Public Works Loan Commis-  
   sioners, 10, 11, 12, 31  
 Purdom, C. B., 24, 29  
  
 Quai des Célestins, 120  
 Queensferry, Chester, 46  
 Railroad Company of the  
   North, 105-109  
 Reggio, 141

- Regional Planning, 23, 31, 51  
Reiss, Capt. Richard, 46  
Rent Restriction Acts, 13, 19,  
69, 76, 94, 134, 157, 192  
Rheims, 9, 93, 94, 99-105, 107  
Ribot, Senator, 91, 110, 183  
Right to a Home, 179  
Roe Green, Hurdon, 46  
Roehampton, 62, 63  
Rome, 133, 134, 141, 147-152  
Rothschild Foundation, 94-96  
Rotterdam, 171  
Rowntree, B. Seebohn, 40  
Rowntree, Joseph, 14  
Royal Commission on the  
Housing of the Industrial  
Population of Scotland, 48  
Rue Cronstadt, 96  
Rue de Fécamp, 116, 119  
Rue de l'Ourcq, 116, 118, 119  
Rue du Poteau, 119, 120  
Rues Boyer and Juillet, 116  
Russian cook stoves, 86  
Ryswyk, 177
- Saida buildings, 97  
St. Angelo, 148  
St.-Denis, 126  
St. Germain, 125  
St. Paul, 149  
St. Quentin, 93, 5 10  
Savings Bank of Milan, 142  
Schaffhausen, 196  
Scheveningen, 175, 177  
Schut, P. Bakker, 174  
Scotland, 47, 48, 49, 58, 137  
Seine, Department of, 111, 120-  
131  
Sellier, Henri, 120  
Service of Social Studies and  
Publications, 120  
Shaftesbury, Earl of, 10  
Shirehampton, Bristol, 46  
Siegfried, Madame, 90  
Siegfried, Senator Jules, 90  
Slum Clearance, 2, 3, 10, 11, 40,  
41, 54, 57, 60, 83, 154, 158,  
174-177, 180  
Small Dwellings Acquisition  
Act, 11  
*Società Umanitaria* (Humanitarian Societies), 142  
*Société anonyme de logements  
économiques*, 97, 98  
*Société anonyme démocratique  
des habitations hygiéniques à  
bon marché*, 99  
*Société française des habita-  
tions à bon marché*, 90  
*Société Nationale des Habita-  
tions à Bon Marché*, 66-75,  
87  
*Société pour la Construction et  
l'Amélioration de Maisons  
d'Ouvriers*, 77  
Soissons, Louis de, 32  
Sorbonne, 125  
Spain, 5, 191-194  
Sparkes, Malcolm, 37  
Stains, 126, 127  
State Action, 6, 39-64, 66-75,  
111-131, 132, 133, 139, 142,  
143, 145, 146, 147-150, 155,  
157-165, 167-170, 171-173,  
174-178, 180, 181, 184, 195  
Subsidy, 5, 6, 51, 56, 57, 67,  
68, 71, 72, 74, 75, 88, 92, 93,  
113, 119, 129, 131, 133, 136,  
137, 145, 154, 157, 158, 159,  
160, 163, 173, 174, 180, 184-  
186, 191, 193, 195  
Suresnes, 120, 126, 127  
Swiss Consumers' Cooperative  
Union, 196  
Switzerland, 194-196  
Taxes, British, 54, 55; British  
and Dutch, 184-186

- Tax Exemption, 5, 57, 90, 94, 133, 136, 147, 191  
 Teissère, 130  
 Tergnier, 9, 107, 108  
 Thompson, Alderman W., 7, 39  
*Tijdschrift voor Volkshuisvesting*, 158  
 Torrens Acts, 10  
 Totterdown Fields, 61  
*Tout-à-l'égout*, 102  
 Town Planning, 11, 12, 15, 31, 40, 42, 43, 50, 51, 93, 94, 102, 112, 154  
*Trois Tilleuls, Les*, 84-87  
 Tudor Walters Report, 49, 50  
*Unione Edilizia Nazionale*  
 (National Building Union), 140, 141, 150  
 United States, 2, 3, 5, 24, 40, 52, 65, 182  
 Unwin, Raymond, 22, 26  
 Valenciennes, 105  
 Van Billoen, A., 69  
 Van der Swaelman, 85  
 Vannes, 123  
 Vatican, 149  
 Venetia, 134  
 Verdun, 94  
 Via Bronzino, 145, 146  
 Via Circondaria, 145  
 Via Erbosa, 145  
 Via Lombardia, 143  
 Via Ostiense, 149  
 Via Porpora, 142  
 Villa Borghese, 151  
 Villagio Gran Sasso, 143  
 Villa Lancellotti, 151, 152  
 La Villette, 118  
 Vincennes, 126  
 Vinck, Senator E., 69, 87  
 Vreewyk, Place of Peace, 171  
 Wales, 49, 58  
 Walthamstow, 36, 37, 38  
 War Housing, 46, 47  
 Washington, 174  
 Watermael-Boitsfort, 84  
 Well Hall, Woolwich, 46  
 Welwyn, 23, 24, 28, 29, 30, 31, 32  
 Wesley Hill, Ltd., 20  
 White City, The, 172  
 White Hart Lane, 61  
 Winterslag, 82, 83  
 Women's Housing Sub-Committee, 50  
 Woodlands Housing Society, Ltd., 18  
 York, 14  
 Ypres, 66  
 Zurich, 194

"Pat. No. 2,029,101"



I S U LIBR



3 2792 019 899 347

REMOVED  
IOWA STATE UNIVERSITY  
LIBRARY

Iowa State University Library

Ames, Iowa 50010

